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DT09 Rec'd PCT/PTO 08 SEP 2004

APPENDIX C

Article 34 Amendment **Filed April 28, 2004**

ATTORNEY DOCKET NUMBER: 2003946-0018 (ANDI/PCT)

IN THE EUROPEAN PATENT OFFICE
AS INTERNATIONAL PRELIMINARY EXAMINING AUTHORITY

Applicant: Eisai Co. Ltd.
Intl. Appln. No.: PCT/US03/07377
Intl. Filing Date: 7 March 2003
Priority: U.S.S.N. 60/362,883 filed 8 March 2002
U.S.S.N. 60/380,711 filed 14 May 2002

For: MACROCYCLIC COMPOUNDS USEFUL AS
PHARMACEUTICALS

VIA FACSIMILE
011-49-89-2399-4465
CONFIRMATION BY
INTERNATIONAL COURIER

EUROPEAN PATENT OFFICE
D-80298 MUNICH
GERMANY
Authorized Officer: Kirsch, C.

Dear Sir/Madam:

REQUEST FOR AMENDMENT UNDER PCT ARTICLE 34

1. Applicant respectfully requests authorization from the International Preliminary Examining Authority for amendment under PCT Article 34 and respectfully submits that the replacement sheets, as submitted herewith, reflect claim amendments which do not introduce new matter. Applicant submits herewith replacement sheets number 378-382, 382a, 384-393, 393a, and 395-421, to replace sheets number 378-382, 384-393, and 395-421, originally filed for this application.

2. In respect of each claim appearing in the international application based on replacement sheets 378-382, 382a, 384-393, 393a, and 395-421 submitted herewith, and in accordance with PCT Section 205(b), the following claim(s) is/are:

(i) Unchanged: Claims 4-21, 38-46, 48-65, 82, 83, 85-88, 90-107, 120-122, 125 and 126 are unchanged;

(ii) Replaced: Claims 1-3, 22-37, 47, 66-81, 84, 89, 108-119, 123 and 124 are replaced with new claims 1-3, 22-37, 47, 66-81, 84, 89, 108-119, 123 and 124, respectively;

A marked-up copy of Claim Replacements highlighting the changes is provided herewith as attached Appendix A. Deletions are represented in strikethrough, and additions are represented in underlining. Please note that the enclosed Appendix A indicates

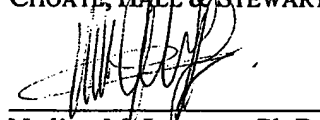
amendments made *in addition to* those made in Applicant's 15 December 2003 Response. Accordingly, replacement sheets number 378-382, 382a, 384-393, 393a, and 395-421 take into account amendments to the claims filed on 15 December 2003.

Applicant respectfully submits that no new matter is presented with these amendments. Specifically, claim language has been amended to replace "lower" with "C₁₋₆". Support for this amendment can be found for example in paragraph [0090] on page 22 of the specification as originally filed.

In addition, claim language has been amended to replace "pharmaceutically acceptable derivative" with "pharmaceutically acceptable salt, ester, or salt of ester". Support for this amendment can be found for example in paragraph [0087] on page 20 of the specification as originally filed.

Applicant hereby requests that the ISA complete its examination upon this submission. Favorable action is respectfully requested.

Respectfully submitted,
CHOATE, HALL & STEWART


Nadège M. Lagneau, Ph.D.
Agent for Applicant

Dated 28 April 2004

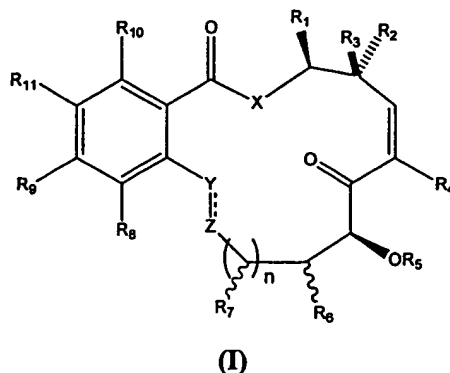
PATENT GROUP
CHOATE, HALL & STEWART
Exchange Place
53 State Street
Boston, MA 02109
Tel: (617) 248-5150
Fax: (617) 248-4000

- APPENDIX A -

VERSION WITH MARKINGS TO SHOW CHANGES MADE

CLAIM REPLACEMENTS

1. A compound having the structure:



or pharmaceutically acceptable salt, ester, or salt of ester thereof;

wherein R_1 is hydrogen, aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl;

R_2 and R_3 are each independently hydrogen, halogen, hydroxyl, protected hydroxyl, or an aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl moiety; or

R_1 and R_2 , when taken together, may form a substituted or unsubstituted, saturated or unsaturated cyclic ring of 3 to 8 carbon atoms; or

R_1 and R_3 , when taken together, may form a substituted or unsubstituted, saturated or unsaturated cyclic ring of 3 to 8 carbon atoms;

R_4 is hydrogen or halogen;

R_5 is hydrogen, an oxygen protecting group or a prodrug;

R_6 is hydrogen, hydroxyl, or protected hydroxyl;

n is 0-2;

R_7 , for each occurrence, is independently hydrogen, hydroxyl, or protected hydroxyl;

R_8 is hydrogen, halogen, hydroxyl, protected hydroxyl, alkyloxy, or an aliphatic moiety optionally substituted with hydroxyl, protected hydroxyl, SR_{12} , or $NR_{12}R_{13}$;

R_9 is hydrogen, halogen, hydroxyl, protected hydroxyl, OR_{12} , SR_{12} , $NR_{12}R_{13}$, -
 ~~$X_1(CH_2)_pX_2-R_{14}$, or is lower alkyl~~ $C_{1-6}alkyl$ optionally substituted with hydroxyl, protected hydroxyl, halogen, amino, protected amino, or $-X_1(CH_2)_pX_2-R_{14}$;

wherein R_{12} and R_{13} are, independently for each occurrence, hydrogen, aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl; or a protecting group, or R_{12} and R_{13} , taken together may form a saturated or unsaturated cyclic ring containing 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms, and each of R_{12} and R_{13} are optionally further substituted with one or more occurrences of hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen,

wherein X_1 and X_2 are each independently absent, or are oxygen, NH, or -N(alkyl), or wherein X_2 - R_{14} together are N_3 or are a saturated or unsaturated heterocyclic moiety,

p is 2-10, and

R_{14} is hydrogen, or an aryl, heteroaryl, alkylaryl, or alkylheteroaryl moiety, or is $-(C=O)NHR_{15}-(C=O)OR_{15}$, or $-(C=O)R_{15}$, wherein each occurrence of R_{15} is independently hydrogen, aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl; or R_{14} is $-SO_2(R_{16})$, wherein R_{16} is an aliphatic moiety, wherein one or more of R_{14} , R_{15} , or R_{16} are optionally substituted with one or more occurrences of hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen; or

R_8 and R_9 may, when taken together, form a saturated or unsaturated cyclic ring containing 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms and is optionally substituted with hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen;

R_{10} is hydrogen, hydroxyl, protected hydroxyl, amino, or protected amino;

R_{11} is hydrogen, hydroxyl or protected hydroxyl;


X is absent or is O, NH, N-alkyl, CH_2 or S;

Y is CHR_{17} , O, $C=O$, CR_{17} or NR_{17} ; and Z is CHR_{18} , O, $C=O$, CR_{18} or NR_{18} , wherein each occurrence of R_{17} and R_{18} is independently hydrogen or aliphatic, or R_{17} and R_{18} taken together is $-O-$, $-CH_2-$ or $-NR_{19}-$, wherein R_{19} is hydrogen or lower-alkyl C₁₋₆alkyl, and Y and Z may be connected by a single or double bond; and

~~pharmaceutically acceptable derivatives thereof;~~

with the proviso that when n is 1; X is O; R_1 is methyl; R_2 , R_3 , R_7 and R_{11} are each hydrogen; R_5 is hydrogen, C_{1-4} alkyl or $-C(=O)C_{1-4}$ alkyl; R_6 is hydrogen, OH, C_{1-4} alkoxy or -

OC(=O)C₁₋₄alkyl; and R₉ is OH, C₁₋₄alkoxy or -OC(=O)C₁₋₄alkyl; then one or more if the following groups do not occur simultaneously as defined:

- (i) R₄ is hydrogen; R₁₀ and R₈ are independently OH, C₁₋₄alkoxy or -OC(=O)C₁₋₄alkyl; and Y-Z is -CH₂CH₂- or -CH=CH-;
- (ii) R₄ and R₈ are each hydrogen; R₁₀ is OH, C₁₋₄alkoxy or -OC(=O)C₁₋₄alkyl; and Y-Z is -CHR^YCHR^Z-, -CH=CH- or ; wherein R^Y and R^Z are independently hydrogen, C₁₋₄alkyl or C₁₋₄alkanoyl; and
- (iii) R₄ and R₁₀ are each hydrogen, OH, C₁₋₄alkoxy or -OC(=O)C₁₋₄alkyl; R₈ is hydrogen, OH, halogen, C₁₋₄alkoxy or -OC(=O)C₁₋₄alkyl; and Y-Z is -CH₂CH₂-, -CH=CH- or -C(=O)CH₂-.

2. The compound of claim 1, where the following groups do not occur simultaneously as defined:

X is oxygen,
R₁ is methyl,
R₂ and R₃ are each hydrogen,
R₄ is hydrogen,
R₅ is hydrogen, ~~lower alkyl~~ C₁₋₆alkyl or ~~lower alkanoyl~~ C₁₋₆alkanoyl,
R₆ is OR', where R' is hydrogen, ~~lower alkyl~~ C₁₋₆alkyl or ~~lower alkanoyl~~ C₁₋₆alkanoyl with S-configuration,
R₇ is hydrogen,
Y and Z together represent -CHR₁₇-CHR₁₈- or -CR₁₇=CR₁₈-, wherein R₁₇ and R₁₈ are independently hydrogen, or when Y and Z are -CHR₁₇-CHR₁₈, R₁₇ and R₁₈ taken together are -O-;
R₈ is hydrogen or OR', where R' is hydrogen, ~~lower alkyl~~ C₁₋₆alkyl or ~~lower alkanoyl~~ C₁₋₆alkanoyl,
R₉ is OR', where R' is hydrogen, ~~lower alkyl~~ C₁₋₆alkyl or ~~lower alkanoyl~~ C₁₋₆alkanoyl,
R₁₀ is OR'', where R'' is hydrogen, ~~lower alkyl~~ C₁₋₆alkyl or ~~lower alkanoyl~~ C₁₋₆alkanoyl; and
R¹¹ is hydrogen.

3. The compound of claim 1, wherein:

R_1 is hydrogen, straight or branched ~~lower-alkyl~~ C₁₋₆alkyl, straight or branched ~~lower heteroalkyl~~ C₁₋₆heteroalkyl, or aryl,

wherein the alkyl, heteroalkyl, and aryl groups may optionally be substituted with one or more occurrences of halogen, hydroxyl or protected hydroxyl;

R_2 and R_3 are each independently hydrogen, halogen, hydroxyl, protected hydroxyl, straight or branched ~~lower-alkyl~~ C₁₋₆alkyl, straight or branched ~~lower heteroalkyl~~ C₁₋₆heteroalkyl, or aryl,

wherein the alkyl, heteroalkyl, and aryl groups may optionally be substituted with one or more occurrences of halogen, hydroxyl or protected hydroxyl; or

R_1 and R_2 , when taken together, may form a saturated or unsaturated cyclic ring of 3 to 8 carbon atoms, optionally substituted with one or more occurrences of halogen; or

R_1 and R_3 , when taken together, may form a saturated or unsaturated cyclic ring of 3 to 8 carbon atoms, optionally substituted with one or more occurrences of halogen;

R_4 is hydrogen or halogen;

R_5 is hydrogen or a protecting group;

R_6 is hydrogen, hydroxyl, or protected hydroxyl;

n is 0-2;

R_7 , for each occurrence, is independently hydrogen, hydroxyl, or protected hydroxyl;

R_8 is hydrogen, halogen, hydroxyl, protected hydroxyl, alkyloxy, or ~~lower-alkyl~~ C₁₋₆alkyl optionally substituted with hydroxyl, protected hydroxyl, SR_{12} , or $NR_{12}R_{13}$;

R_9 is hydrogen, halogen, hydroxyl, protected hydroxyl, OR_{12} , SR_{12} , $NR_{12}R_{13}$, - $X_1(CH_2)_pX_2-R_{14}$, or is ~~lower-alkyl~~ C₁₋₆alkyl optionally substituted with hydroxyl, protected hydroxyl, halogen, amino, protected amino, or - $X_1(CH_2)_pX_2-R_{14}$;

wherein R_{12} and R_{13} are, independently for each occurrence, hydrogen, ~~lower alkyl~~ C₁₋₆alkyl, aryl, heteroaryl, alkylaryl, or alkylheteroaryl, or a protecting group, or R_{12} and R_{13} , taken together may form a saturated or unsaturated cyclic ring containing 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms, and each of R_{12} and R_{13} are optionally further substituted with one or more occurrences of hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen,

wherein X_1 and X_2 are each independently absent, or are oxygen, NH, or -N(alkyl), or wherein X_2 - R_{14} together are N_3 or are a saturated or unsaturated heterocyclic moiety,

p is 2-10, and

R_{14} is hydrogen, or an aryl, heteroaryl, alkylaryl, or alkylheteroaryl moiety, or is $-(C=O)NHR_{15}$ $-(C=O)OR_{15}$, or $-(C=O)R_{15}$, wherein each occurrence of R_{15} is independently hydrogen, alkyl, heteroalkyl, aryl, heteroaryl, alkylaryl, or alkylheteroaryl, or R_{14} is $-SO_2(R_{16})$, wherein R_{16} is an alkyl moiety, wherein one or more of R_{14} , R_{15} , or R_{16} are optionally substituted with one or more occurrences of hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen; or

R_8 and R_9 may, when taken together, form a saturated or unsaturated cyclic ring containing 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms and is optionally substituted with hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen;

R_{10} is hydrogen, hydroxyl, protected hydroxyl, amino, or protected amino;

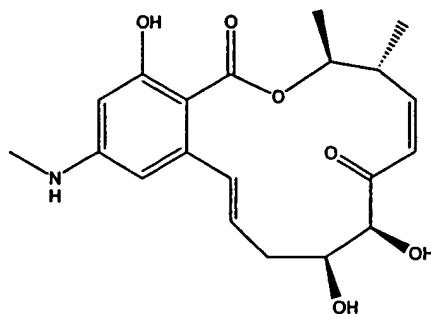
R_{11} is hydrogen, hydroxyl or protected hydroxyl;

X is absent or is O, NH, N-alkyl, CH_2 or S;

Y is CHR_{17} , O, $C=O$, CR_{17} or NR_{17} ; and Z is CHR_{18} , O, $C=O$, CR_{18} or NR_{18} , wherein each occurrence of R_{17} and R_{18} is independently hydrogen or lower alkyl C_{1-6} alkyl, or R_{17} and R_{18} taken together is $-O-$, $-CH_2-$ or $-NR_{19}-$, wherein R_{19} is hydrogen or lower alkyl C_{1-6} alkyl, and Y and Z may be connected by a single or double bond; and

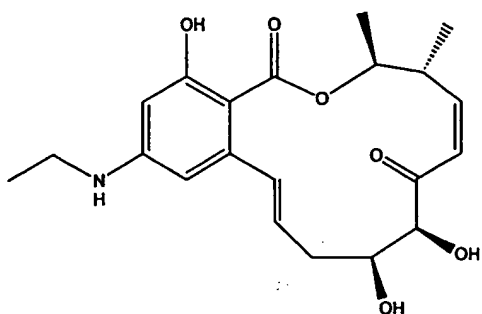
~~pharmaceutically acceptable derivatives thereof.~~

22. A compound having the structure:



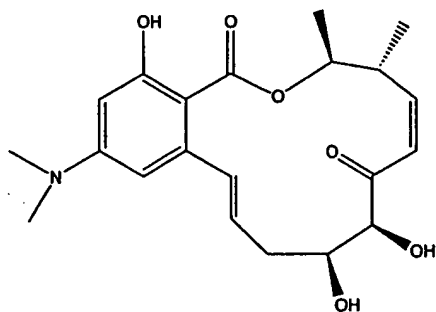
~~and pharmaceutically acceptable derivatives thereof~~ or pharmaceutically acceptable salt, ester, or salt of ester thereof.

23. A compound having the structure:



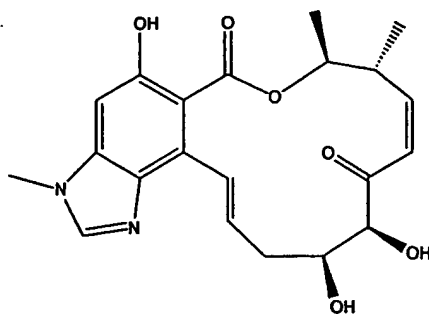
~~and pharmaceutically acceptable derivatives thereof~~ or pharmaceutically acceptable salt, ester, or salt of ester thereof.

24. A compound having the structure:



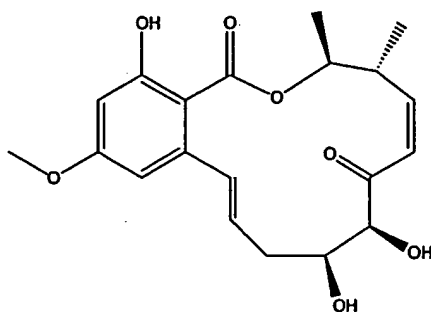
~~and pharmaceutically acceptable derivatives thereof~~ or pharmaceutically acceptable salt, ester, or salt of ester thereof.

25. A compound having the structure:



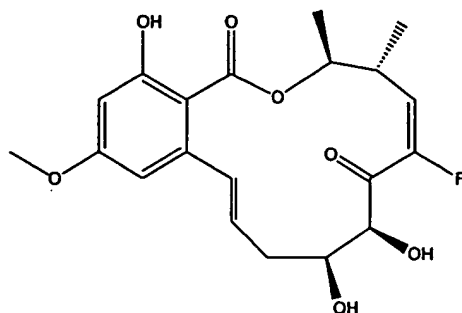
~~and pharmaceutically acceptable derivatives thereof~~ or pharmaceutically acceptable salt, ester, or salt of ester thereof.

26. A compound having the structure:



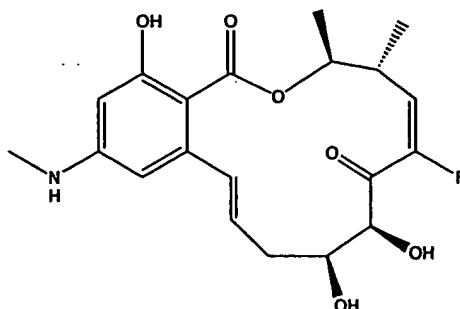
~~and pharmaceutically acceptable derivatives thereof~~ or pharmaceutically acceptable salt, ester, or salt of ester thereof.

27. A compound having the structure:



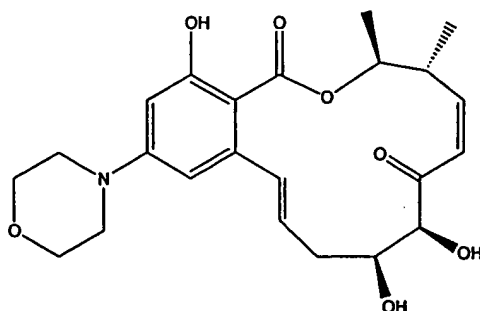
~~and pharmaceutically acceptable derivatives thereof~~ or pharmaceutically acceptable salt, ester, or salt of ester thereof.

28. A compound having the structure:



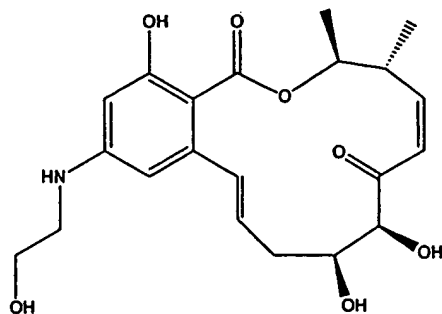
~~and pharmaceutically acceptable derivatives thereof~~ or pharmaceutically acceptable salt, ester, or salt of ester thereof.

29. A compound having the structure:



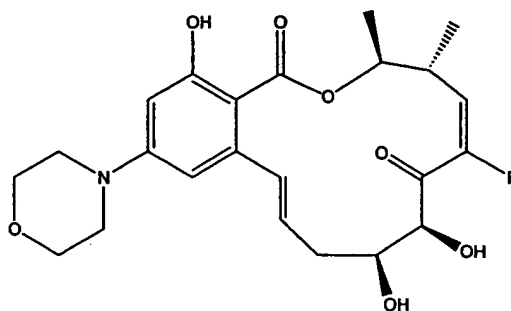
~~and pharmaceutically acceptable derivatives thereof~~ or pharmaceutically acceptable salt, ester, or salt of ester thereof.

30. A compound having the structure:



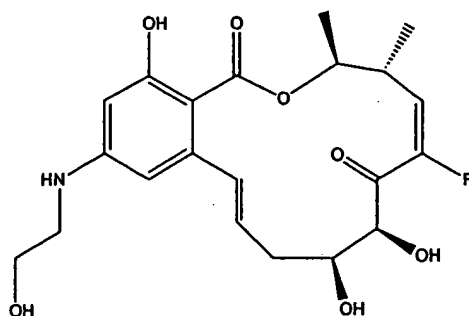
~~and pharmaceutically acceptable derivatives thereof~~ or pharmaceutically acceptable salt, ester, or salt of ester thereof.

31. A compound having the structure:



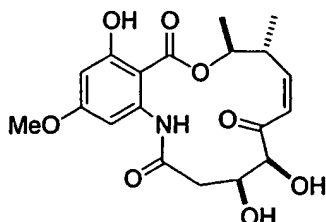
~~and pharmaceutically acceptable derivatives thereof~~ or pharmaceutically acceptable salt, ester, or salt of ester thereof.

32. A compound having the structure:



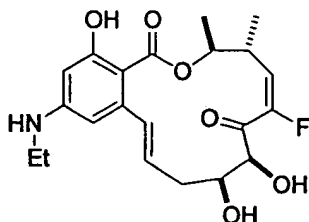
~~and pharmaceutically acceptable derivatives thereof~~ or pharmaceutically acceptable salt, ester, or salt of ester thereof.

33. A compound having the structure:



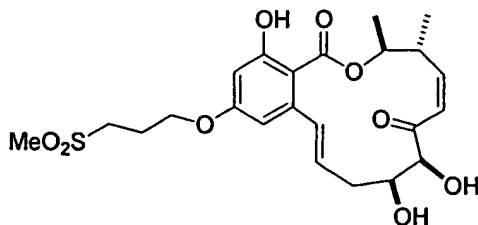
~~and pharmaceutically acceptable derivatives thereof~~ or pharmaceutically acceptable salt, ester, or salt of ester thereof.

34. A compound having the structure:



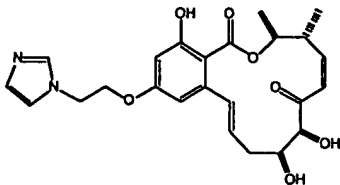
~~and pharmaceutically acceptable derivatives thereof~~ or pharmaceutically acceptable salt, ester, or salt of ester thereof.

35. A compound having the structure:



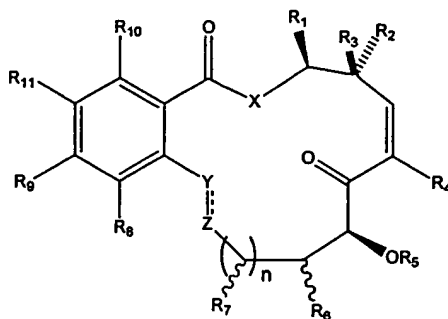
~~and pharmaceutically acceptable derivatives thereof~~ or pharmaceutically acceptable salt, ester, or salt of ester thereof.

36. A compound having the structure:



~~and pharmaceutically acceptable derivatives thereof~~ or pharmaceutically acceptable salt, ester, or salt of ester thereof.

37. A pharmaceutical composition comprising:
a compound having the structure:



(I)

or pharmaceutically acceptable salt, ester, or salt of ester thereof;

wherein R_1 is hydrogen, aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl;

R_2 and R_3 are each independently hydrogen, halogen, hydroxyl, protected hydroxyl, or an aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl moiety; or

R_1 and R_2 , when taken together, may form a substituted or unsubstituted, saturated or unsaturated cyclic ring of 3 to 8 carbon atoms; or

R₁ and R₃, when taken together, may form a substituted or unsubstituted, saturated or unsaturated cyclic ring of 3 to 8 carbon atoms;

R₄ is hydrogen or halogen;

R₅ is hydrogen, an oxygen protecting group or a prodrug;

R₆ is hydrogen, hydroxyl, or protected hydroxyl;

n is 0-2;

R₇, for each occurrence, is independently hydrogen, hydroxyl, or protected hydroxyl;

R₈ is hydrogen, halogen, hydroxyl, protected hydroxyl, alkyloxy, or an aliphatic moiety optionally substituted with hydroxyl, protected hydroxyl, SR₁₂, or NR₁₂R₁₃;

R₉ is hydrogen, halogen, hydroxyl, protected hydroxyl, OR₁₂, SR₁₂, NR₁₂R₁₃, -X₁(CH₂)_pX₂-R₁₄, or is ~~lower alkyl~~ C₁₋₆alkyl optionally substituted with hydroxyl, protected hydroxyl, halogen, amino, protected amino, or -X₁(CH₂)_pX₂-R₁₄;

wherein R₁₂ and R₁₃ are, independently for each occurrence, hydrogen, aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl; or a protecting group, or R₁₂ and R₁₃, taken together may form a saturated or unsaturated cyclic ring containing 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms, and each of R₁₂ and R₁₃ are optionally further substituted with one or more occurrences of hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen,

wherein X₁ and X₂ are each independently absent, or are oxygen, NH, or -N(alkyl), or wherein X₂-R₁₄ together are N₃ or are a saturated or unsaturated heterocyclic moiety,

p is 2-10, and

R₁₄ is hydrogen, or an aryl, heteroaryl, alkylaryl, or alkylheteroaryl moiety, or is -(C=O)NHR₁₅ -(C=O)OR₁₅, or -(C=O)R₁₅, wherein each occurrence of R₁₅ is independently hydrogen, aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl; or R₁₄ is -SO₂(R₁₆), wherein R₁₆ is an aliphatic moiety, wherein one or more of R₁₄, R₁₅, or R₁₆ are optionally substituted with one or more occurrences of hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen; or

R₈ and R₉ may, when taken together, form a saturated or unsaturated cyclic ring containing 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms and is optionally

substituted with hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen;

R_{10} is hydrogen, hydroxyl, protected hydroxyl, amino, or protected amino;

R_{11} is hydrogen, hydroxyl or protected hydroxyl;

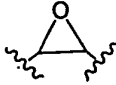
X is absent or is O, NH, N-alkyl, CH_2 or S;

Y is CHR_{17} , O, $C=O$, CR_{17} or NR_{17} ; and Z is CHR_{18} , O, $C=O$, CR_{18} or NR_{18} , wherein each occurrence of R_{17} and R_{18} is independently hydrogen or aliphatic, or R_{17} and R_{18} taken together is $-O-$, $-CH_2-$ or $-NR_{19}-$, wherein R_{19} is hydrogen or lower alkyl C₁₋₆alkyl, and Y and Z may be connected by a single or double bond; ~~pharmaceutically acceptable derivatives thereof;~~ and

a pharmaceutically acceptable carrier;

with the proviso that when n is 1; X is O; R_1 is methyl; R_2 , R_3 , R_7 and R_{11} are each hydrogen; R_5 is hydrogen, C_{1-4} alkyl or $-C(=O)C_{1-4}$ alkyl; R_6 is hydrogen, OH, C_{1-4} alkoxy or $-OC(=O)C_{1-4}$ alkyl; and R_9 is OH, C_{1-4} alkoxy or $-OC(=O)C_{1-4}$ alkyl; then one or more if the following groups do not occur simultaneously as defined:

- (i) R_4 is hydrogen; R_{10} and R_8 are independently OH, C_{1-4} alkoxy or $-OC(=O)C_{1-4}$ alkyl; and Y-Z is $-CH_2CH_2-$ or $-CH=CH-$;
- (ii) R_4 and R_8 are each hydrogen; R_{10} is OH, C_{1-4} alkoxy or $-OC(=O)C_{1-4}$ alkyl; and

Y-Z is $-CHR^YCHR^Z-$, $-CH=CH-$ or ; wherein R^Y and R^Z are independently hydrogen, C_{1-4} alkyl or C_{1-4} alkanoyl; and

- (iii) R_4 and R_{10} are each hydrogen, OH, C_{1-4} alkoxy or $-OC(=O)C_{1-4}$ alkyl; R_8 is hydrogen, OH, halogen, C_{1-4} alkoxy or $-OC(=O)C_{1-4}$ alkyl; and Y-Z is $-CH_2CH_2-$, $-CH=CH-$ or $-C(=O)CH_2-$.

47. The pharmaceutical composition of claim 37, where:

R_1 is hydrogen, straight or branched lower alkyl C₁₋₆alkyl, straight or branched lower heteroalkyl C₁₋₆heteroalkyl, or aryl,

wherein the alkyl, heteroalkyl, and aryl groups may optionally be substituted with one or more occurrences of halogen, hydroxyl or protected hydroxyl;

R₂ and R₃ are each independently hydrogen, halogen, hydroxyl, protected hydroxyl, straight or branched ~~lower alkyl~~ C₁₋₆alkyl, straight or branched ~~lower heteroalkyl~~ C₁₋₆heteroalkyl, or aryl,

wherein the alkyl, heteroalkyl, and aryl groups may optionally be substituted with one or more occurrences of halogen, hydroxyl or protected hydroxyl; or R₁ and R₂, when taken together, may form a saturated or unsaturated cyclic ring of 3 to 8 carbon atoms, optionally substituted with one or more occurrences of halogen; or R₁ and R₃, when taken together, may form a saturated or unsaturated cyclic ring of 3 to 8 carbon atoms, optionally substituted with one or more occurrences of halogen;

R₄ is hydrogen or halogen;

R₅ is hydrogen or a protecting group;

R₆ is hydrogen, hydroxyl, or protected hydroxyl;

n is 0-2;

R₇, for each occurrence, is independently hydrogen, hydroxyl, or protected hydroxyl;

R₈ is hydrogen, halogen, hydroxyl, protected hydroxyl, alkyloxy, or ~~lower alkyl~~ C₁₋₆alkyl optionally substituted with hydroxyl, protected hydroxyl, SR₁₂, or NR₁₂R₁₃;

R₉ is hydrogen, halogen, hydroxyl, protected hydroxyl, OR₁₂, SR₁₂, NR₁₂R₁₃, -X₁(CH₂)_pX₂-R₁₄, or is ~~lower alkyl~~ C₁₋₆alkyl optionally substituted with hydroxyl, protected hydroxyl, halogen, amino, protected amino, or -X₁(CH₂)_pX₂-R₁₄;

wherein R₁₂ and R₁₃ are, independently for each occurrence, hydrogen, ~~lower alkyl~~ C₁₋₆alkyl, aryl, heteroaryl, alkylaryl, or alkylheteroaryl, or a protecting group, or R₁₂ and R₁₃, taken together may form a saturated or unsaturated cyclic ring containing 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms, and each of R₁₂ and R₁₃ are optionally further substituted with one or more occurrences of hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen, wherein X₁ and X₂ are each independently absent, or are oxygen, NH, or -N(alkyl), or wherein X₂-R₁₄ together are N₃ or are a saturated or unsaturated heterocyclic moiety,

p is 2-10, and

R₁₄ is hydrogen, or an aryl, heteroaryl, alkylaryl, or alkylheteroaryl moiety, or is -(C=O)NHR₁₅-(C=O)OR₁₅, or -(C=O)R₁₅, wherein each occurrence of R₁₅ is independently hydrogen, alkyl, heteroalkyl, aryl, heteroaryl, alkylaryl, or alkylheteroaryl, or R₁₄ is -SO₂(R₁₆), wherein R₁₆ is an alkyl moiety, wherein one or

more of R₁₄, R₁₅, or R₁₆ are optionally substituted with one or more occurrences of hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen; or

R₈ and R₉ may, when taken together, form a saturated or unsaturated cyclic ring containing 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms and is optionally substituted with hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen;

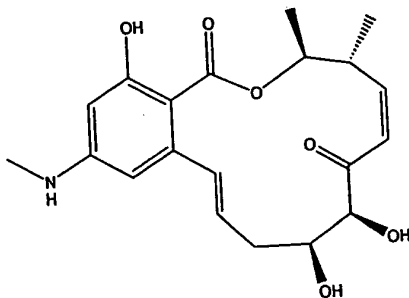
R₁₀ is hydrogen, hydroxyl, protected hydroxyl, amino, or protected amino;

R₁₁ is hydrogen, hydroxyl or protected hydroxyl;

X is absent or is O, NH, N-alkyl, CH₂ or S;

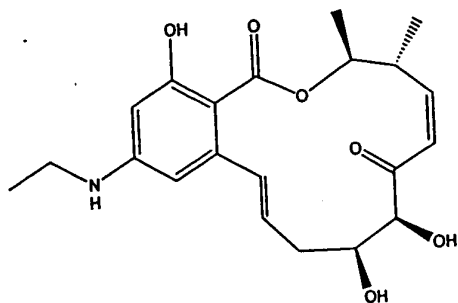
Y is CHR₁₇, O, C=O, CR₁₇ or NR₁₇; and Z is CHR₁₈, O, C=O, CR₁₈ or NR₁₈, wherein each occurrence of R₁₇ and R₁₈ is independently hydrogen or lower alkyl C₁₋₆alkyl, or R₁₇ and R₁₈ taken together is -O-, -CH₂- or -NR₁₉-, wherein R₁₉ is hydrogen or lower alkyl C₁₋₆alkyl, and Y and Z may be connected by a single or double bond.

66. A pharmaceutical composition comprising:
a compound having the structure:



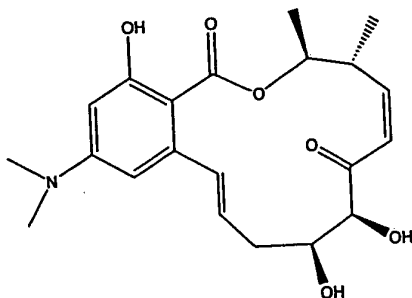
and pharmaceutically acceptable derivatives thereof or pharmaceutically acceptable salt, ester, or salt of ester thereof; and
a pharmaceutically acceptable carrier.

67. A pharmaceutical composition comprising:
a compound having the structure:



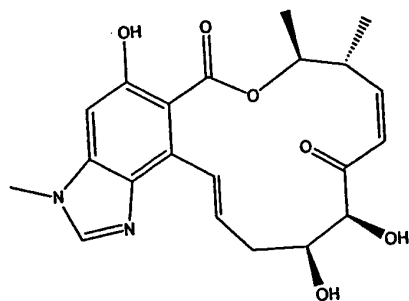
~~and pharmaceutically acceptable derivatives thereof~~ or pharmaceutically acceptable salt, ester, or salt of ester thereof; and
a pharmaceutically acceptable carrier.

68. A pharmaceutical composition comprising:
a compound having the structure:



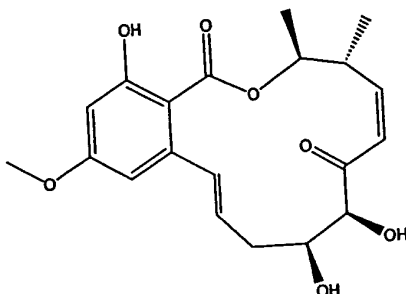
~~and pharmaceutically acceptable derivatives thereof~~ or pharmaceutically acceptable salt, ester, or salt of ester thereof; and
a pharmaceutically acceptable carrier.

69. A pharmaceutical composition comprising:
a compound having the structure:



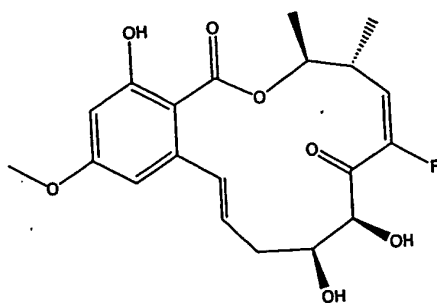
and pharmaceutically acceptable derivatives thereof or pharmaceutically acceptable salt, ester, or salt of ester thereof; and
a pharmaceutically acceptable carrier.

70. A pharmaceutical composition comprising:
a compound having the structure:



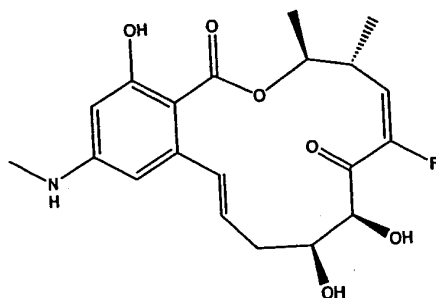
and pharmaceutically acceptable derivatives thereof or pharmaceutically acceptable salt, ester, or salt of ester thereof; and
a pharmaceutically acceptable carrier.

71. A pharmaceutical composition comprising:
a compound having the structure:



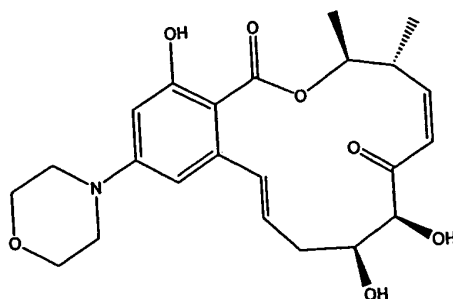
~~and pharmaceutically acceptable derivatives thereof or pharmaceutically acceptable salt, ester, or salt of ester thereof; and~~
a pharmaceutically acceptable carrier.

72. A pharmaceutical composition comprising:
a compound having the structure:



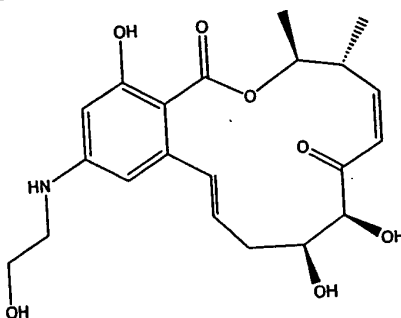
~~and pharmaceutically acceptable derivatives thereof or pharmaceutically acceptable salt, ester, or salt of ester thereof; and~~
a pharmaceutically acceptable carrier.

73. A pharmaceutical composition comprising:
a compound having the structure:



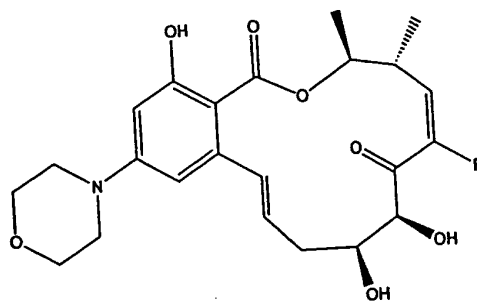
~~and pharmaceutically acceptable derivatives thereof~~ or pharmaceutically acceptable salt, ester, or salt of ester thereof; and a pharmaceutically acceptable carrier.

74. A pharmaceutical composition comprising:
a compound having the structure:



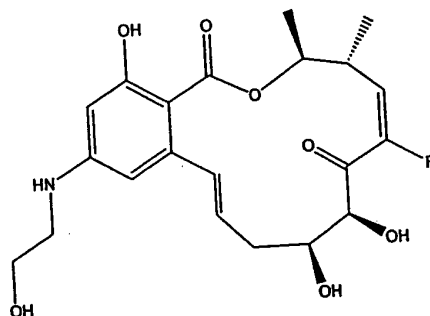
~~and pharmaceutically acceptable derivatives thereof~~ or pharmaceutically acceptable salt, ester, or salt of ester thereof; and a pharmaceutically acceptable carrier.

75. A pharmaceutical composition comprising:
a compound having the structure:



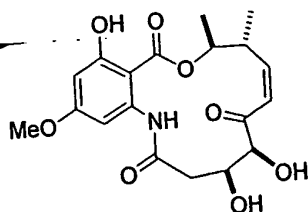
~~and pharmaceutically acceptable derivatives thereof~~ or pharmaceutically acceptable salt, ester, or salt of ester thereof; and
a pharmaceutically acceptable carrier.

76. A pharmaceutical composition comprising:
a compound having the structure:



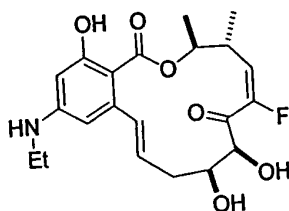
~~and pharmaceutically acceptable derivatives thereof~~ or pharmaceutically acceptable salt, ester, or salt of ester thereof; and
a pharmaceutically acceptable carrier.

77. A pharmaceutical composition comprising:
a compound having the structure:



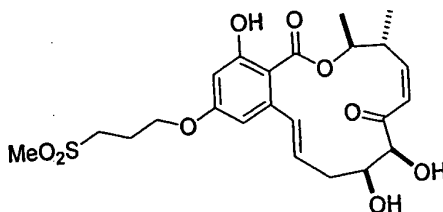
~~and pharmaceutically acceptable derivatives thereof~~ or pharmaceutically acceptable salt, ester, or salt of ester thereof; and
a pharmaceutically acceptable carrier.

78. A pharmaceutical composition comprising:
a compound having the structure:



~~and pharmaceutically acceptable derivatives thereof~~ or pharmaceutically acceptable salt, ester, or salt of ester thereof; and
a pharmaceutically acceptable carrier.

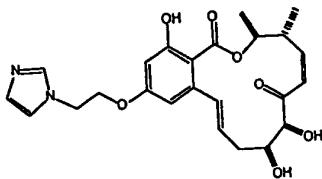
79. A pharmaceutical composition comprising:
a compound having the structure:



~~and pharmaceutically acceptable derivatives thereof~~ or pharmaceutically acceptable salt, ester, or salt of ester thereof; and

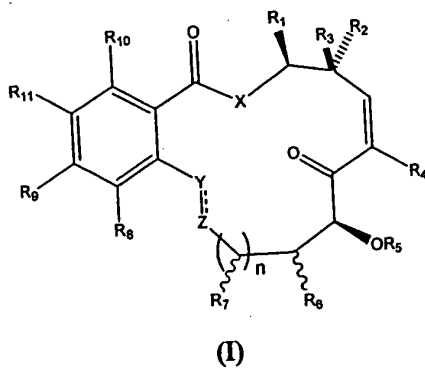
a pharmaceutically acceptable carrier.

80. A pharmaceutical composition comprising:
a compound having the structure:



and pharmaceutically acceptable derivatives thereof or pharmaceutically acceptable salt, ester, or salt of ester thereof; and
a pharmaceutically acceptable carrier.

81. A topical pharmaceutical composition for preventing or treating UVB-induced photodamage comprising:
a compound having the structure:



or pharmaceutically acceptable salt, ester, or salt of ester thereof;
wherein R₁ is hydrogen, straight or branched lower alkyl, C₁₋₆alkyl, straight or branched lower heteroalkyl, C₁₋₆heteroalkyl, or aryl,
wherein the alkyl, heteroalkyl, and aryl groups may optionally be substituted
with one or more occurrences of halogen, hydroxyl or protected hydroxyl;

R₂ and R₃ are each independently hydrogen, halogen, hydroxyl, protected hydroxyl, straight or branched lower alkyl C₁₋₆alkyl, straight or branched lower heteroalkyl C₁₋₆heteroalkyl, or aryl,

wherein the alkyl, heteroalkyl, and aryl groups may optionally be substituted with one or more occurrences of halogen, hydroxyl or protected hydroxyl; or R₁ and R₂, when taken together, may form a saturated or unsaturated cyclic ring of 3 to 8 carbon atoms, optionally substituted with one or more occurrences of halogen; or R₁ and R₃, when taken together, may form a saturated or unsaturated cyclic ring of 3 to 8 carbon atoms, optionally substituted with one or more occurrences of halogen;

R₄ is hydrogen or halogen;

R₅ is hydrogen or a protecting group;

R₆ is hydrogen, hydroxyl, or protected hydroxyl;

n is 0-2;

R₇, for each occurrence, is independently hydrogen, hydroxyl, or protected hydroxyl;

R₈ is hydrogen, halogen, hydroxyl, protected hydroxyl, alkyloxy, or lower alkyl C₁₋₆alkyl optionally substituted with hydroxyl, protected hydroxyl, SR₁₂, or NR₁₂R₁₃;

R₉ is hydrogen, halogen, hydroxyl, protected hydroxyl, OR₁₂, SR₁₂, NR₁₂R₁₃, -X₁(CH₂)_pX₂-R₁₄, or is lower alkyl C₁₋₆alkyl optionally substituted with hydroxyl, protected hydroxyl, halogen, amino, protected amino, or -X₁(CH₂)_pX₂-R₁₄;

wherein R₁₂ and R₁₃ are, independently for each occurrence, hydrogen, lower alkyl C₁₋₆alkyl, aryl, heteroaryl, alkylaryl, or alkylheteroaryl, or a protecting group, or R₁₂ and R₁₃, taken together may form a saturated or unsaturated cyclic ring containing 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms, and each of R₁₂ and R₁₃ are optionally further substituted with one or more occurrences of hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen, wherein X₁ and X₂ are each independently absent, or are oxygen, NH, or -N(alkyl), or wherein X₂-R₁₄ together are N₃ or are a saturated or unsaturated heterocyclic moiety,

p is 2-10, and

R₁₄ is hydrogen, or an aryl, heteroaryl, alkylaryl, or alkylheteroaryl moiety, or is - (C=O)NHR₁₅ - (C=O)OR₁₅, or - (C=O)R₁₅, wherein each occurrence of R₁₅ is independently hydrogen, alkyl, heteroalkyl, aryl, heteroaryl, alkylaryl, or alkylheteroaryl, or R₁₄ is -SO₂(R₁₆), wherein R₁₆ is an alkyl moiety, wherein one or

more of R_{14} , R_{15} , or R_{16} are optionally substituted with one or more occurrences of hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen; or

R_8 and R_9 may, when taken together, form a saturated or unsaturated cyclic ring containing 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms and is optionally substituted with hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen;

R_{10} is hydrogen, hydroxyl, protected hydroxyl, amino, or protected amino;

R_{11} is hydrogen, hydroxyl or protected hydroxyl;

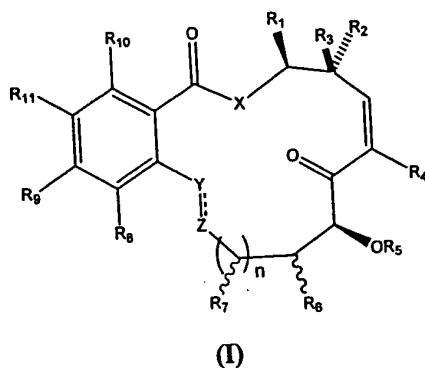
X is absent or is O, NH, N-alkyl, CH_2 or S;

Y is CHR_{17} , O, C=O, CR_{17} or NR_{17} ; and Z is CHR_{18} , O, C=O, CR_{18} or NR_{18} , wherein each occurrence of R_{17} and R_{18} is independently hydrogen or lower alkyl C₁₋₆alkyl, or R_{17} and R_{18} taken together is -O-, - CH_2 - or - NR_{19} -, wherein R_{19} is hydrogen or lower alkyl C₁₋₆alkyl, and Y and Z may be connected by a single or double bond; ~~pharmaceutically acceptable derivatives thereof; and~~

a pharmaceutically acceptable carrier;

wherein the compound is present in an amount effective to prevent or treat UVB-induced photodamage.

84. A method for treating an inflammatory and/or autoimmune disorder or a disorder resulting from increased angiogenesis and/or cell proliferation comprising:
administering to a subject in need thereof a therapeutically effective amount of a compound having the structure:



or pharmaceutically acceptable salt, ester, or salt of ester thereof;

wherein R_1 is hydrogen, aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl;

R_2 and R_3 are each independently hydrogen, halogen, hydroxyl, protected hydroxyl, or an aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl moiety; or

R_1 and R_2 , when taken together, may form a substituted or unsubstituted, saturated or unsaturated cyclic ring of 3 to 8 carbon atoms; or

R_1 and R_3 , when taken together, may form a substituted or unsubstituted, saturated or unsaturated cyclic ring of 3 to 8 carbon atoms;

R_4 is hydrogen or halogen;

R_5 is hydrogen, an oxygen protecting group or a prodrug;

R_6 is hydrogen, hydroxyl, or protected hydroxyl;

n is 0-2;

R_7 , for each occurrence, is independently hydrogen, hydroxyl, or protected hydroxyl;

R_8 is hydrogen, halogen, hydroxyl, protected hydroxyl, alkyloxy, or an aliphatic moiety optionally substituted with hydroxyl, protected hydroxyl, SR_{12} , or $NR_{12}R_{13}$;

R_9 is hydrogen, halogen, hydroxyl, protected hydroxyl, OR_{12} , SR_{12} , $NR_{12}R_{13}$, - $X_1(CH_2)_pX_2-R_{14}$, or is ~~lower alkyl~~ C_{1-6} alkyl optionally substituted with hydroxyl, protected hydroxyl, halogen, amino, protected amino, or - $X_1(CH_2)_pX_2-R_{14}$;

wherein R_{12} and R_{13} are, independently for each occurrence, hydrogen, aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl; or a protecting group, or R_{12} and R_{13} , taken together may form a saturated or unsaturated cyclic ring containing 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms, and each of R_{12} and R_{13} are optionally further substituted with one or more occurrences of hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen,

wherein X_1 and X_2 are each independently absent, or are oxygen, NH, or -N(alkyl), or wherein X_2-R_{14} together are N_3 or are a saturated or unsaturated heterocyclic moiety,

p is 2-10, and

R_{14} is hydrogen, or an aryl, heteroaryl, alkylaryl, or alkylheteroaryl moiety, or is - $(C=O)NHR_{15}$ - $(C=O)OR_{15}$, or - $(C=O)R_{15}$, wherein each occurrence of R_{15} is independently hydrogen, aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or

heteroaryl; or R_{14} is $-\text{SO}_2(R_{16})$, wherein R_{16} is an aliphatic moiety, wherein one or more of R_{14} , R_{15} , or R_{16} are optionally substituted with one or more occurrences of hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen; or

R_8 and R_9 may, when taken together, form a saturated or unsaturated cyclic ring containing 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms and is optionally substituted with hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen;

R_{10} is hydrogen, hydroxyl, protected hydroxyl, amino, or protected amino;

R_{11} is hydrogen, hydroxyl or protected hydroxyl;

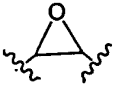
X is absent or is O, NH, N-alkyl, CH_2 or S;

Y is CHR_{17} , O, $\text{C}=\text{O}$, CR_{17} or NR_{17} ; and Z is CHR_{18} , O, $\text{C}=\text{O}$, CR_{18} or NR_{18} , wherein each occurrence of R_{17} and R_{18} is independently hydrogen or aliphatic, or R_{17} and R_{18} taken together is $-\text{O}-$, $-\text{CH}_2-$ or $-\text{NR}_{19}-$, wherein R_{19} is hydrogen or lower alkyl C_{1-6} alkyl, and Y and Z may be connected by a single or double bond; ~~pharmaceutically acceptable derivatives thereof; and~~

a pharmaceutically acceptable carrier or diluent;

with the proviso that when n is 1; X is O; R_1 is methyl; R_2 , R_3 , R_7 and R_{11} are each hydrogen; R_5 is hydrogen, C_{1-4} alkyl or $-\text{C}(=\text{O})\text{C}_{1-4}$ alkyl; R_6 is hydrogen, OH, C_{1-4} alkoxy or $-\text{OC}(=\text{O})\text{C}_{1-4}$ alkyl; and R_9 is OH, C_{1-4} alkoxy or $-\text{OC}(=\text{O})\text{C}_{1-4}$ alkyl; then one or more if the following groups do not occur simultaneously as defined:

- (i) R_4 is hydrogen; R_{10} and R_8 are independently OH, C_{1-4} alkoxy or $-\text{OC}(=\text{O})\text{C}_{1-4}$ alkyl; and Y-Z is $-\text{CH}_2\text{CH}_2-$ or $-\text{CH}=\text{CH}-$; and
- (ii) R_4 and R_8 are each hydrogen; R_{10} is OH, C_{1-4} alkoxy or $-\text{OC}(=\text{O})\text{C}_{1-4}$ alkyl; and

Y-Z is $-\text{CHR}^Y\text{CHR}^Z-$, $-\text{CH}=\text{CH}-$ or ; wherein R^Y and R^Z are independently hydrogen, C_{1-4} alkyl or C_{1-4} alkanoyl; and

- (iii) R_4 and R_{10} are each hydrogen, OH, C_{1-4} alkoxy or $-\text{OC}(=\text{O})\text{C}_{1-4}$ alkyl; R_8 is hydrogen, OH, halogen, C_{1-4} alkoxy or $-\text{OC}(=\text{O})\text{C}_{1-4}$ alkyl; and Y-Z is $-\text{CH}_2\text{CH}_2-$, $-\text{CH}=\text{CH}-$ or $-\text{C}(=\text{O})\text{CH}_2-$; whereby the compound induces mRNA degradation and the method is for treating a disorder resulting from cell proliferation.

89. The method of claim 84, wherein:

R_1 is hydrogen, straight or branched ~~lower alkyl~~ C₁₋₆alkyl, straight or branched ~~lower heteroalkyl~~ C₁₋₆heteroalkyl, or aryl,

wherein the alkyl, heteroalkyl, and aryl groups may optionally be substituted with one or more occurrences of halogen, hydroxyl or protected hydroxyl;

R_2 and R_3 are each independently hydrogen, halogen, hydroxyl, protected hydroxyl, straight or branched ~~lower alkyl~~ C₁₋₆alkyl, straight or branched ~~lower heteroalkyl~~ C₁₋₆heteroalkyl, or aryl,

wherein the alkyl, heteroalkyl, and aryl groups may optionally be substituted with one or more occurrences of halogen, hydroxyl or protected hydroxyl; or

R_1 and R_2 , when taken together, may form a saturated or unsaturated cyclic ring of 3 to 8 carbon atoms, optionally substituted with one or more occurrences of halogen; or

R_1 and R_3 , when taken together, may form a saturated or unsaturated cyclic ring of 3 to 8 carbon atoms, optionally substituted with one or more occurrences of halogen;

R_4 is hydrogen or halogen;

R_5 is hydrogen or a protecting group;

R_6 is hydrogen, hydroxyl, or protected hydroxyl;

n is 0-2;

R_7 , for each occurrence, is independently hydrogen, hydroxyl, or protected hydroxyl;

R_8 is hydrogen, halogen, hydroxyl, protected hydroxyl, alkyloxy, or ~~lower alkyl~~ C₁₋₆alkyl optionally substituted with hydroxyl, protected hydroxyl, SR_{12} , or $NR_{12}R_{13}$;

R_9 is hydrogen, halogen, hydroxyl, protected hydroxyl, OR_{12} , SR_{12} , $NR_{12}R_{13}$, - $X_1(CH_2)_pX_2-R_{14}$, or is ~~lower alkyl~~ C₁₋₆alkyl optionally substituted with hydroxyl, protected hydroxyl, halogen, amino, protected amino, or - $X_1(CH_2)_pX_2-R_{14}$;

wherein R_{12} and R_{13} are, independently for each occurrence, hydrogen, ~~lower alkyl~~ C₁₋₆alkyl, aryl, heteroaryl, alkylaryl, or alkylheteroaryl, or a protecting group, or R_{12} and R_{13} , taken together may form a saturated or unsaturated cyclic ring containing 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms, and each of R_{12} and R_{13} are optionally further substituted with one or more occurrences of hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen,

wherein X_1 and X_2 are each independently absent, or are oxygen, NH, or -N(alkyl), or wherein X_2 - R_{14} together are N_3 or are a saturated or unsaturated heterocyclic moiety,

p is 2-10, and

R_{14} is hydrogen, or an aryl, heteroaryl, alkylaryl, or alkylheteroaryl moiety, or is $-(C=O)NHR_{15}$, $-(C=O)OR_{15}$, or $-(C=O)R_{15}$, wherein each occurrence of R_{15} is independently hydrogen, alkyl, heteroalkyl, aryl, heteroaryl, alkylaryl, or alkylheteroaryl, or R_{14} is $-SO_2(R_{16})$, wherein R_{16} is an alkyl moiety, wherein one or more of R_{14} , R_{15} , or R_{16} are optionally substituted with one or more occurrences of hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen; or

R_8 and R_9 may, when taken together, form a saturated or unsaturated cyclic ring containing 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms and is optionally substituted with hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen;

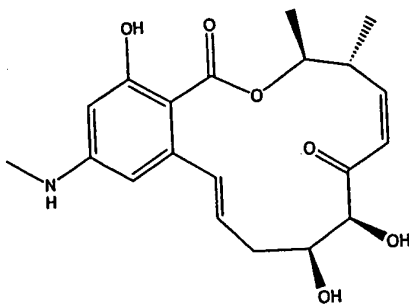
R_{10} is hydrogen, hydroxyl, protected hydroxyl, amino, or protected amino;

R_{11} is hydrogen, hydroxyl or protected hydroxyl;

X is absent or is O, NH, N-alkyl, CH_2 or S;

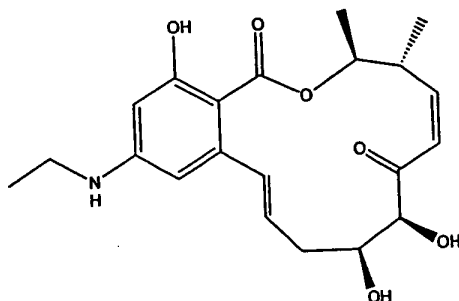
Y is CHR_{17} , O, $C=O$, CR_{17} or NR_{17} ; and Z is CHR_{18} , O, $C=O$, CR_{18} or NR_{18} , wherein each occurrence of R_{17} and R_{18} is independently hydrogen or lower-alkyl C_{1-6} alkyl, or R_{17} and R_{18} taken together is $-O-$, $-CH_2-$ or $-NR_{19}-$, wherein R_{19} is hydrogen or lower-alkyl C_{1-6} alkyl, and Y and Z may be connected by a single or double bond.

108. The method of claim 84, comprising administering a compound having the structure:



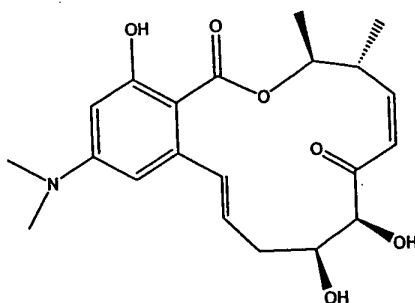
~~and pharmaceutically acceptable derivatives thereof~~ or pharmaceutically acceptable salt, ester, or salt of ester thereof.

109. The method of claim 84, comprising administering a compound having the structure:



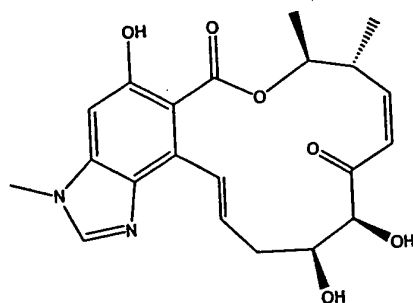
~~and pharmaceutically acceptable derivatives thereof~~ or pharmaceutically acceptable salt, ester, or salt of ester thereof.

110. The method of claim 84, comprising administering a compound having the structure:



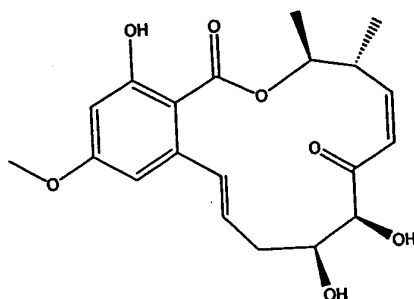
~~and pharmaceutically acceptable derivatives thereof~~ or pharmaceutically acceptable salt, ester, or salt of ester thereof.

111. The method of claim 84, comprising administering a compound having the structure:



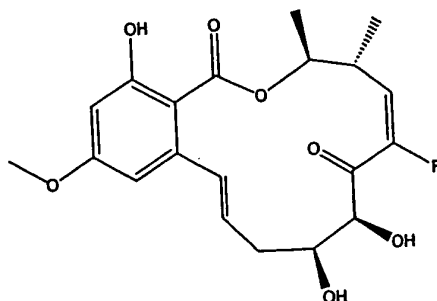
and pharmaceutically acceptable derivatives thereof or pharmaceutically acceptable salt, ester, or salt of ester thereof.

112. The method of claim 84, comprising administering a compound having the structure:



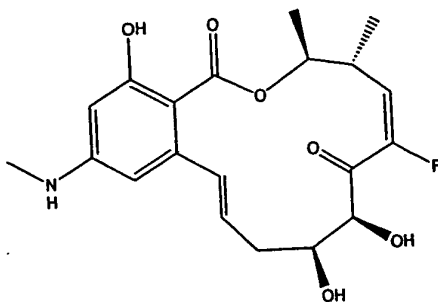
and pharmaceutically acceptable derivatives thereof or pharmaceutically acceptable salt, ester, or salt of ester thereof.

113. The method of claim 84, comprising administering a compound having the structure:



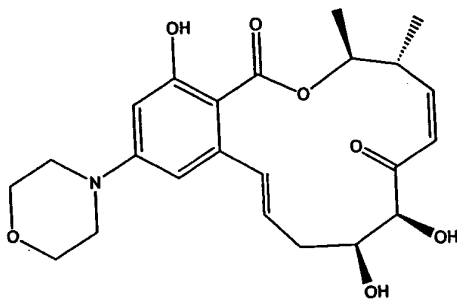
and pharmaceutically acceptable derivatives thereof or pharmaceutically acceptable salt, ester, or salt of ester thereof.

114. The method of claim 84, comprising administering a compound having the structure:



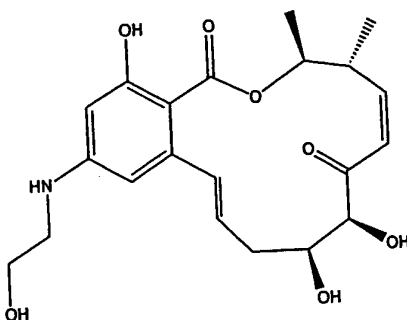
~~and pharmaceutically acceptable derivatives thereof~~ or pharmaceutically acceptable salt, ester, or salt of ester thereof.

115. The method of claim 84, comprising administering a compound having the structure:



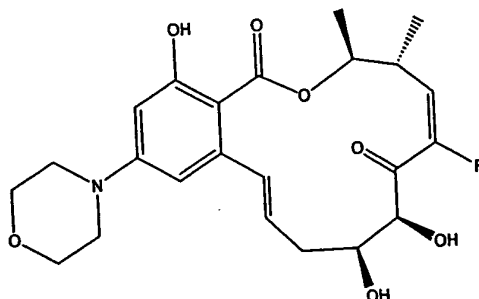
~~and pharmaceutically acceptable derivatives thereof~~ or pharmaceutically acceptable salt, ester, or salt of ester thereof.

116. The method of claim 84, comprising administering a compound having the structure:



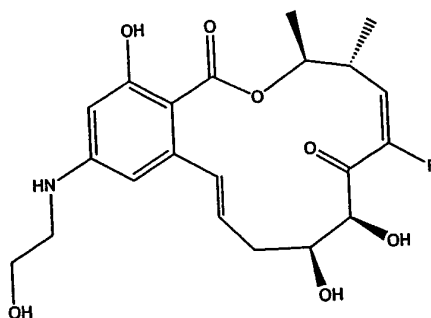
~~and pharmaceutically acceptable derivatives thereof~~ or pharmaceutically acceptable salt, ester, or salt of ester thereof.

117. The method of claim 84, comprising administering a compound having the structure:



~~and pharmaceutically acceptable derivatives thereof~~ or pharmaceutically acceptable salt, ester, or salt of ester thereof.

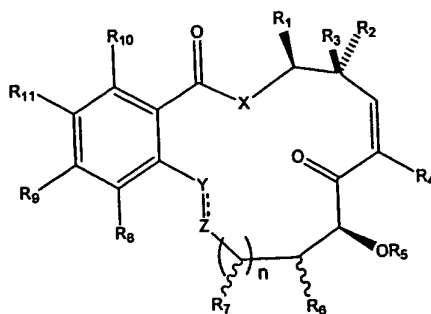
118. The method of claim 84, comprising administering a compound having the structure:



~~and pharmaceutically acceptable derivatives thereof~~ or pharmaceutically acceptable salt, ester, or salt of ester thereof.

119. A method for providing protection against UVB-induced photodamage to a subject, said method comprising:

Administering to the subject in need thereof a composition comprising a compound having the structure:



(I)

or pharmaceutically acceptable salt, ester, or salt of ester thereof;

wherein R_1 is hydrogen, straight or branched lower alkyl C₁₋₆alkyl, straight or branched lower heteroalkyl C₁₋₆heteroalkyl, or aryl,

wherein the alkyl, heteroalkyl, and aryl groups may optionally be substituted with one or more occurrences of halogen, hydroxyl or protected hydroxyl;

R_2 and R_3 are each independently hydrogen, halogen, hydroxyl, protected hydroxyl, straight or branched lower alkyl C₁₋₆alkyl, straight or branched lower heteroalkyl C₁₋₆heteroalkyl, or aryl,

wherein the alkyl, heteroalkyl, and aryl groups may optionally be substituted

with one or more occurrences of halogen, hydroxyl or protected hydroxyl; or

R_1 and R_2 , when taken together, may form a saturated or unsaturated cyclic ring of 3 to 8 carbon atoms, optionally substituted with one or more occurrences of halogen; or

R_1 and R_3 , when taken together, may form a saturated or unsaturated cyclic ring of 3 to 8 carbon atoms, optionally substituted with one or more occurrences of halogen;

R_4 is hydrogen or halogen;

R_5 is hydrogen or a protecting group;

R_6 is hydrogen, hydroxyl, or protected hydroxyl;

n is 0-2;

R_7 , for each occurrence, is independently hydrogen, hydroxyl, or protected hydroxyl;

R_8 is hydrogen, halogen, hydroxyl, protected hydroxyl, alkyloxy, or lower alkyl C₁₋₆alkyl optionally substituted with hydroxyl, protected hydroxyl, SR_{12} , or $NR_{12}R_{13}$;

R_9 is hydrogen, halogen, hydroxyl, protected hydroxyl, OR_{12} , SR_{12} , $NR_{12}R_{13}$, -

$X_1(CH_2)_pX_2-R_{14}$, or is lower alkyl C₁₋₆alkyl optionally substituted with hydroxyl, protected hydroxyl, halogen, amino, protected amino, or $-X_1(CH_2)_pX_2-R_{14}$;

wherein R_{12} and R_{13} are, independently for each occurrence, hydrogen, lower alkyl C₁₋₆alkyl, aryl, heteroaryl, alkylaryl, or alkylheteroaryl, or a protecting group, or R_{12} and R_{13} , taken together may form a saturated or unsaturated cyclic ring containing 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms, and each of R_{12} and R_{13} are optionally further substituted with one or more occurrences of hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen,

wherein X_1 and X_2 are each independently absent, or are oxygen, NH, or -N(alkyl), or wherein X_2 - R_{14} together are N_3 or are a saturated or unsaturated heterocyclic moiety,

p is 2-10, and

R_{14} is hydrogen, or an aryl, heteroaryl, alkylaryl, or alkylheteroaryl moiety, or is $-(C=O)NHR_{15}$, $-(C=O)OR_{15}$, or $-(C=O)R_{15}$, wherein each occurrence of R_{15} is independently hydrogen, alkyl, heteroalkyl, aryl, heteroaryl, alkylaryl, or alkylheteroaryl, or R_{14} is $-SO_2(R_{16})$, wherein R_{16} is an alkyl moiety, wherein one or more of R_{14} , R_{15} , or R_{16} are optionally substituted with one or more occurrences of hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen; or

R_8 and R_9 may, when taken together, form a saturated or unsaturated cyclic ring containing 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms and is optionally substituted with hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen;

R_{10} is hydrogen, hydroxyl, protected hydroxyl, amino, or protected amino;

R_{11} is hydrogen, hydroxyl or protected hydroxyl;

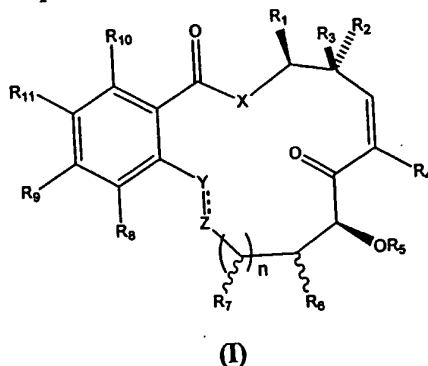
X is absent or is O, NH, N-alkyl, CH_2 or S;

Y is CHR_{17} , O, $C=O$, CR_{17} or NR_{17} ; and Z is CHR_{18} , O, $C=O$, CR_{18} or NR_{18} , wherein each occurrence of R_{17} and R_{18} is independently hydrogen or lower alkyl C₁₋₆alkyl, or R_{17} and R_{18} taken together is $-O-$, $-CH_2-$ or $-NR_{19}-$, wherein R_{19} is hydrogen or lower alkyl C₁₋₆alkyl, and Y and Z may be connected by a single or double bond; ~~pharmaceutically acceptable derivatives thereof;~~ and

a pharmaceutically acceptable carrier or diluent.

123. A method for preventing or reducing the rate of restenosis, comprising:

inserting a stent into an obstructed blood vessel, the stent having a generally tubular structure, the surface of the structure being coated with (or otherwise adapted to release) a composition comprising a compound having the structure:



or pharmaceutically acceptable salt, ester, or salt of ester thereof;

wherein R_1 is hydrogen, straight or branched lower alkyl C₁₋₆alkyl, straight or branched lower heteroalkyl C₁₋₆heteroalkyl, or aryl,

wherein the alkyl, heteroalkyl, and aryl groups may optionally be substituted with one or more occurrences of halogen, hydroxyl or protected hydroxyl;

R_2 and R_3 are each independently hydrogen, halogen, hydroxyl, protected hydroxyl, straight or branched lower alkyl C₁₋₆alkyl, straight or branched lower heteroalkyl C₁₋₆heteroalkyl, or aryl,

wherein the alkyl, heteroalkyl, and aryl groups may optionally be substituted with one or more occurrences of halogen, hydroxyl or protected hydroxyl; or

R_1 and R_2 , when taken together, may form a saturated or unsaturated cyclic ring of 3 to 8 carbon atoms, optionally substituted with one or more occurrences of halogen; or

R_1 and R_3 , when taken together, may form a saturated or unsaturated cyclic ring of 3 to 8 carbon atoms, optionally substituted with one or more occurrences of halogen;

R_4 is hydrogen or halogen;

R_5 is hydrogen or a protecting group;

R_6 is hydrogen, hydroxyl, or protected hydroxyl;

n is 0-2;

R_7 , for each occurrence, is independently hydrogen, hydroxyl, or protected hydroxyl;

R_8 is hydrogen, halogen, hydroxyl, protected hydroxyl, alkyloxy, or lower alkyl C₁₋₆alkyl optionally substituted with hydroxyl, protected hydroxyl, SR_{12} , or $NR_{12}R_{13}$;

R_9 is hydrogen, halogen, hydroxyl, protected hydroxyl, OR_{12} , SR_{12} , $NR_{12}R_{13}$, $-X_1(CH_2)_pX_2-R_{14}$, or is ~~lower-alkyl~~ C_{1-6} alkyl optionally substituted with hydroxyl, protected hydroxyl, halogen, amino, protected amino, or $-X_1(CH_2)_pX_2-R_{14}$;

wherein R_{12} and R_{13} are, independently for each occurrence, hydrogen, ~~lower-alkyl~~ C_{1-6} alkyl, aryl, heteroaryl, alkylaryl, or alkylheteroaryl, or a protecting group, or R_{12} and R_{13} , taken together may form a saturated or unsaturated cyclic ring containing 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms, and each of R_{12} and R_{13} are optionally further substituted with one or more occurrences of hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen, wherein X_1 and X_2 are each independently absent, or are oxygen, NH, or $-N(alkyl)$, or wherein X_2-R_{14} together are N_3 or are a saturated or unsaturated heterocyclic moiety,

p is 2-10, and

R_{14} is hydrogen, or an aryl, heteroaryl, alkylaryl, or alkylheteroaryl moiety, or is $-(C=O)NHR_{15}$, $-(C=O)OR_{15}$, or $-(C=O)R_{15}$, wherein each occurrence of R_{15} is independently hydrogen, alkyl, heteroalkyl, aryl, heteroaryl, alkylaryl, or alkylheteroaryl, or R_{14} is $-SO_2(R_{16})$, wherein R_{16} is an alkyl moiety, wherein one or more of R_{14} , R_{15} , or R_{16} are optionally substituted with one or more occurrences of hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen; or

R_8 and R_9 may, when taken together, form a saturated or unsaturated cyclic ring containing 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms and is optionally substituted with hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen;

R_{10} is hydrogen, hydroxyl, protected hydroxyl, amino, or protected amino;

R_{11} is hydrogen, hydroxyl or protected hydroxyl;

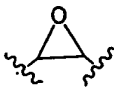
X is absent or is O, NH, N-alkyl, CH_2 or S;

Y is CHR_{17} , O, $C=O$, CR_{17} or NR_{17} ; and Z is CHR_{18} , O, $C=O$, CR_{18} or NR_{18} , wherein each occurrence of R_{17} and R_{18} is independently hydrogen or ~~lower-alkyl~~ C_{1-6} alkyl, or R_{17} and R_{18} taken together is $-O-$, $-CH_2-$ or $-NR_{19}-$, wherein R_{19} is hydrogen or ~~lower-alkyl~~ C_{1-6} alkyl, and Y and Z may be connected by a single or double bond; ~~pharmaceutically acceptable derivatives thereof~~; and optionally

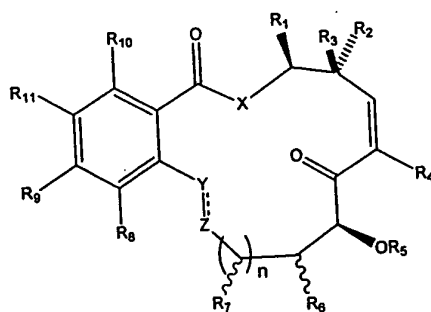
a pharmaceutically acceptable carrier or diluent;

such that the obstruction is eliminated and the composition is delivered in amounts effective to prevent or reduce the rate of restenosis;

with the proviso that the following groups do not occur simultaneously as defined: n is 1; X is O; R₁ is methyl; R₂, R₃, R₄, R₇, R₈ and R₁₁ are each hydrogen; R₅ is hydrogen, C₁₋₄alkyl or -C(=O)C₁₋₄alkyl; R₆ is hydrogen, OH, C₁₋₄alkoxy or -OC(=O)C₁₋₄alkyl; R₉ and R₁₀ are independently OH, C₁₋₄alkoxy or -OC(=O)C₁₋₄alkyl; and Y-Z is -CHR^YCHR^Z-, -

CH=CH- or ; wherein R^Y and R^Z are independently hydrogen, C₁₋₄alkyl or C₁₋₄alkanoyl.

124. A method for expanding the lumen of a body passageway, comprising:
 inserting a stent into the passageway, the stent having a generally tubular structure,
 the surface of the structure being coated with (or otherwise adapted to release) a composition
 comprising a compound having the structure:



(I)

or pharmaceutically acceptable salt, ester, or salt of ester thereof;

wherein R₁ is hydrogen, straight or branched lower alkyl, C₁₋₆alkyl, straight or branched lower heteroalkyl, C₁₋₆heteroalkyl, or aryl,

wherein the alkyl, heteroalkyl, and aryl groups may optionally be substituted

with one or more occurrences of halogen, hydroxyl or protected hydroxyl;

R₂ and R₃ are each independently hydrogen, halogen, hydroxyl, protected hydroxyl, straight or branched lower alkyl, C₁₋₆alkyl, straight or branched lower heteroalkyl, C₁₋₆heteroalkyl, or aryl,

wherein the alkyl, heteroalkyl, and aryl groups may optionally be substituted with one or more occurrences of halogen, hydroxyl or protected hydroxyl; or R₁ and R₂, when taken together, may form a saturated or unsaturated cyclic ring of 3 to 8 carbon atoms, optionally substituted with one or more occurrences of halogen; or R₁ and R₃, when taken together, may form a saturated or unsaturated cyclic ring of 3 to 8 carbon atoms, optionally substituted with one or more occurrences of halogen; R₄ is hydrogen or halogen; R₅ is hydrogen or a protecting group; R₆ is hydrogen, hydroxyl, or protected hydroxyl; n is 0-2; R₇, for each occurrence, is independently hydrogen, hydroxyl, or protected hydroxyl; R₈ is hydrogen, halogen, hydroxyl, protected hydroxyl, alkyloxy, or ~~lower alkyl~~ C₁-alkyl optionally substituted with hydroxyl, protected hydroxyl, SR₁₂, or NR₁₂R₁₃; R₉ is hydrogen, halogen, hydroxyl, protected hydroxyl, OR₁₂, SR₁₂, NR₁₂R₁₃, -X₁(CH₂)_pX₂-R₁₄, or is ~~lower alkyl~~ C₁-alkyl optionally substituted with hydroxyl, protected hydroxyl, halogen, amino, protected amino, or -X₁(CH₂)_pX₂-R₁₄;

wherein R₁₂ and R₁₃ are, independently for each occurrence, hydrogen, ~~lower alkyl~~ C₁-alkyl, aryl, heteroaryl, alkylaryl, or alkylheteroaryl, or a protecting group, or R₁₂ and R₁₃, taken together may form a saturated or unsaturated cyclic ring containing 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms, and each of R₁₂ and R₁₃ are optionally further substituted with one or more occurrences of hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen, wherein X₁ and X₂ are each independently absent, or are oxygen, NH, or -N(alkyl), or wherein X₂-R₁₄ together are N₃ or are a saturated or unsaturated heterocyclic moiety,

p is 2-10, and

R₁₄ is hydrogen, or an aryl, heteroaryl, alkylaryl, or alkylheteroaryl moiety, or is -(C=O)NHR₁₅ -(C=O)OR₁₅, or -(C=O)R₁₅, wherein each occurrence of R₁₅ is independently hydrogen, alkyl, heteroalkyl, aryl, heteroaryl, alkylaryl, or alkylheteroaryl, or R₁₄ is -SO₂(R₁₆), wherein R₁₆ is an alkyl moiety, wherein one or more of R₁₄, R₁₅, or R₁₆ are optionally substituted with one or more occurrences of hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen; or

R₈ and R₉ may, when taken together, form a saturated or unsaturated cyclic ring containing 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms and is optionally substituted with hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen;

R₁₀ is hydrogen, hydroxyl, protected hydroxyl, amino, or protected amino;

R₁₁ is hydrogen, hydroxyl or protected hydroxyl;

X is absent or is O, NH, N-alkyl, CH₂ or S;

Y is CHR₁₇, O, C=O, CR₁₇ or NR₁₇; and Z is CHR₁₈, O, C=O, CR₁₈ or NR₁₈, wherein each occurrence of R₁₇ and R₁₈ is independently hydrogen or ~~lower alkyl~~ C₁₋₆alkyl, or R₁₇ and R₁₈ taken together is -O-, -CH₂- or -NR₁₉-, wherein R₁₉ is hydrogen or ~~lower alkyl~~ C₁₋₆alkyl, and Y and Z may be connected by a single or double bond; ~~pharmaceutically acceptable derivatives thereof~~; and optionally

a pharmaceutically acceptable carrier or diluent;

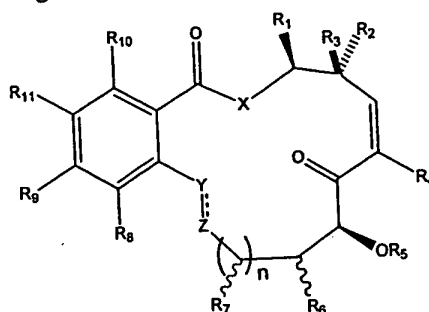
such that the passageway is expanded.

SUBSTITUTE SHEETS

CLAIMS

We claim:

1. A compound having the structure:



(I)

or pharmaceutically acceptable salt, ester, or salt of ester thereof;

wherein R_1 is hydrogen, aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl;

R_2 and R_3 are each independently hydrogen, halogen, hydroxyl, protected hydroxyl, or an aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl moiety; or

R_1 and R_2 , when taken together, may form a substituted or unsubstituted, saturated or unsaturated cyclic ring of 3 to 8 carbon atoms; or

R_1 and R_3 , when taken together, may form a substituted or unsubstituted, saturated or unsaturated cyclic ring of 3 to 8 carbon atoms;

R_4 is hydrogen or halogen;

R_5 is hydrogen, an oxygen protecting group or a prodrug;

R_6 is hydrogen, hydroxyl, or protected hydroxyl;

n is 0-2;

R_7 , for each occurrence, is independently hydrogen, hydroxyl, or protected hydroxyl;

R_8 is hydrogen, halogen, hydroxyl, protected hydroxyl, alkyloxy, or an aliphatic moiety optionally substituted with hydroxyl, protected hydroxyl, SR_{12} , or $NR_{12}R_{13}$;

R_9 is hydrogen, halogen, hydroxyl, protected hydroxyl, OR_{12} , SR_{12} , $NR_{12}R_{13}$, $-X_1(CH_2)_pX_2-R_{14}$, or is C_{1-6} alkyl optionally substituted with hydroxyl, protected hydroxyl, halogen, amino, protected amino, or $-X_1(CH_2)_pX_2-R_{14}$;

wherein R_{12} and R_{13} are, independently for each occurrence, hydrogen, aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl; or a protecting group, or R_{12} and R_{13} , taken together may form a saturated or unsaturated cyclic ring containing 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms, and each of R_{12} and R_{13} are optionally further substituted with one or more occurrences of hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen,

wherein X_1 and X_2 are each independently absent, or are oxygen, NH, or -N(alkyl), or wherein X_2 - R_{14} together are N_3 or are a saturated or unsaturated heterocyclic moiety,

p is 2-10, and

R_{14} is hydrogen, or an aryl, heteroaryl, alkylaryl, or alkylheteroaryl moiety, or is $-(C=O)NHR_{15}$, $-(C=O)OR_{15}$, or $-(C=O)R_{15}$, wherein each occurrence of R_{15} is independently hydrogen, aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl; or R_{14} is $-SO_2(R_{16})$, wherein R_{16} is an aliphatic moiety, wherein one or more of R_{14} , R_{15} , or R_{16} are optionally substituted with one or more occurrences of hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen; or R_8 and R_9 may, when taken together, form a saturated or unsaturated cyclic

ring containing 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms and is optionally substituted with hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen;

R_{10} is hydrogen, hydroxyl, protected hydroxyl, amino, or protected amino;


R_{11} is hydrogen, hydroxyl or protected hydroxyl;

X is absent or is O, NH, N-alkyl, CH_2 or S;

Y is CHR_{17} , O, $C=O$, CR_{17} or NR_{17} ; and Z is CHR_{18} , O, $C=O$, CR_{18} or NR_{18} ,

wherein each occurrence of R_{17} and R_{18} is independently hydrogen or aliphatic, or R_{17} and R_{18} taken together is $-O-$, $-CH_2-$ or $-NR_{19}-$, wherein R_{19} is hydrogen or C_{1-6} alkyl, and Y and Z may be connected by a single or double bond;

with the proviso that when n is 1; X is O; R_1 is methyl; R_2 , R_3 , R_7 and R_{11} are each hydrogen; R_5 is hydrogen, C_{1-4} alkyl or $-C(=O)C_{1-4}$ alkyl; R_6 is hydrogen, OH, C_{1-4} alkoxy or $-OC(=O)C_{1-4}$ alkyl; and R_9 is OH, C_{1-4} alkoxy or $-OC(=O)C_{1-4}$ alkyl; then one or more if the following groups do not occur simultaneously as defined:

- (i) R_4 is hydrogen; R_{10} and R_8 are independently OH, C_{1-4} alkoxy or $-OC(=O)C_{1-4}$ alkyl; and Y-Z is $-CH_2CH_2-$ or $-CH=CH-$;
- (ii) R_4 and R_8 are each hydrogen; R_{10} is OH, C_{1-4} alkoxy or $-OC(=O)C_{1-4}$ alkyl; and Y-Z is $-CHR^YCHR^Z-$, $-CH=CH-$ or ; wherein R^Y and R^Z are independently hydrogen, C_{1-4} alkyl or C_{1-4} alkanoyl; and
- (iii) R_4 and R_{10} are each hydrogen, OH, C_{1-4} alkoxy or $-OC(=O)C_{1-4}$ alkyl; R_8 is hydrogen, OH, halogen, C_{1-4} alkoxy or $-OC(=O)C_{1-4}$ alkyl; and Y-Z is $-CH_2CH_2-$, $-CH=CH-$ or $-C(=O)CH_2-$.

2. The compound of claim 1, where the following groups do not occur simultaneously as defined:

X is oxygen,

R_1 is methyl,

R_2 and R_3 are each hydrogen,

R_4 is hydrogen,

R_5 is hydrogen, C_{1-6} alkyl or C_{1-6} alkanoyl,

R_6 is OR' , where R' is hydrogen, C_{1-6} alkyl or C_{1-6} alkanoyl with S-configuration,

R_7 is hydrogen,

Y and Z together represent $-CHR_{17}-CHR_{18}-$ or $-CR_{17}=CR_{18}-$, wherein

R_{17} and R_{18} are independently hydrogen, or when Y and Z are $-CHR_{17}-CHR_{18}$, R_{17} and R_{18} taken together are $-O-$;

R_8 is hydrogen or OR' , where R' is hydrogen, C_{1-6} alkyl or C_{1-6} alkanoyl,

R_9 is OR' , where R' is hydrogen, C_{1-6} alkyl or C_{1-6} alkanoyl,

R_{10} is OR'' , where R'' is hydrogen, C_{1-6} alkyl or C_{1-6} alkanoyl; and

R_{11} is hydrogen.

3. The compound of claim 1, wherein:

R_1 is hydrogen, straight or branched C_{1-6} alkyl, straight or branched C_{1-6} heteroalkyl, or aryl,

wherein the alkyl, heteroalkyl, and aryl groups may optionally be substituted with one or more occurrences of halogen, hydroxyl or protected hydroxyl;

R_2 and R_3 are each independently hydrogen, halogen, hydroxyl, protected hydroxyl, straight or branched C_{1-6} alkyl, straight or branched C_{1-6} heteroalkyl, or aryl,

wherein the alkyl, heteroalkyl, and aryl groups may optionally be substituted with one or more occurrences of halogen, hydroxyl or protected hydroxyl; or

R_1 and R_2 , when taken together, may form a saturated or unsaturated cyclic ring of 3 to 8 carbon atoms, optionally substituted with one or more occurrences of halogen; or

R_1 and R_3 , when taken together, may form a saturated or unsaturated cyclic ring of 3 to 8 carbon atoms, optionally substituted with one or more occurrences of halogen;

R_4 is hydrogen or halogen;

R_5 is hydrogen or a protecting group;

R_6 is hydrogen, hydroxyl, or protected hydroxyl;

n is 0-2;

R_7 , for each occurrence, is independently hydrogen, hydroxyl, or protected hydroxyl;

R_8 is hydrogen, halogen, hydroxyl, protected hydroxyl, alkyloxy, or C_{1-6} alkyl optionally substituted with hydroxyl, protected hydroxyl, SR_{12} , or $NR_{12}R_{13}$;

R_9 is hydrogen, halogen, hydroxyl, protected hydroxyl, OR_{12} , SR_{12} , $NR_{12}R_{13}$, $-X_1(CH_2)_pX_2-R_{14}$, or is C_{1-6} alkyl optionally substituted with hydroxyl, protected hydroxyl, halogen, amino, protected amino, or $-X_1(CH_2)_pX_2-R_{14}$;

wherein R_{12} and R_{13} are, independently for each occurrence, hydrogen, C_{1-6} alkyl, aryl, heteroaryl, alkylaryl, or alkylheteroaryl, or a protecting group, or R_{12} and R_{13} , taken together may form a saturated or unsaturated cyclic ring containing 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms, and each of R_{12} and R_{13} are optionally further substituted with one or more occurrences of hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen,

wherein X_1 and X_2 are each independently absent, or are oxygen, NH, or -N(alkyl), or wherein X_2 - R_{14} together are N_3 or are a saturated or unsaturated heterocyclic moiety,

p is 2-10, and

R_{14} is hydrogen, or an aryl, heteroaryl, alkylaryl, or alkylheteroaryl moiety, or is $-(C=O)NHR_{15}$ $-(C=O)OR_{15}$, or $-(C=O)R_{15}$, wherein each occurrence of R_{15} is independently hydrogen, alkyl, heteroalkyl, aryl, heteroaryl, alkylaryl, or alkylheteroaryl, or R_{14} is $-SO_2(R_{16})$, wherein R_{16} is an alkyl moiety, wherein one or more of R_{14} , R_{15} , or R_{16} are optionally substituted with one or more occurrences of hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen; or

R_8 and R_9 may, when taken together, form a saturated or unsaturated cyclic ring containing 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms and is optionally substituted with hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen;

R_{10} is hydrogen, hydroxyl, protected hydroxyl, amino, or protected amino;

R_{11} is hydrogen, hydroxyl or protected hydroxyl;

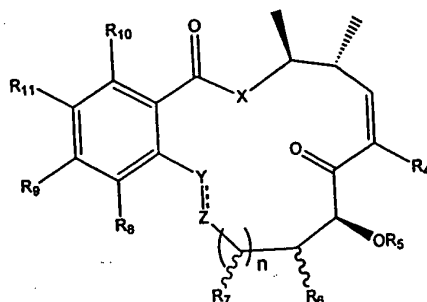
X is absent or is O, NH, N-alkyl, CH_2 or S;

Y is CHR_{17} , O, $C=O$, CR_{17} or NR_{17} ; and Z is CHR_{18} , O, $C=O$, CR_{18} or NR_{18} ,

wherein each occurrence of R_{17} and R_{18} is independently hydrogen or C_{1-6} alkyl, or R_{17} and R_{18} taken together is $-O-$, $-CH_2-$ or $-NR_{19}-$, wherein R_{19} is hydrogen or C_{1-6} alkyl, and Y and Z may be connected by a single or double bond.

4. The compound of claim 3, where X is oxygen and n is 1.
5. The compound of claim 3, where R_4 is halogen.
6. The compound of claim 3, where R_4 is fluorine.
7. The compound of claim 3, where Y and Z together represent $-CH=CH-$.
8. The compound of claim 3, where Y and Z together represent trans $-CH=CH-$.

9. The compound of claim 3, wherein R_1 and R_2 are each methyl and R_3 is hydrogen and the compound has the structure:



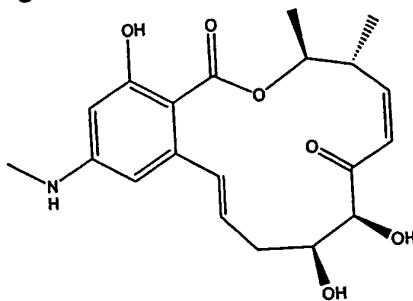
wherein R_4 - R_{11} , n , X , Y and Z are as defined in claim 3.

10. The compound of claim 9, wherein X is oxygen and n is 1.
11. The compound of claim 9, wherein R_4 is halogen.

20. The compound of claim 15, wherein X is oxygen, n is 1, R₁ and R₂ are each methyl, R₃ is hydrogen, R₄ is halogen, and Y and Z together represent -CH=CH-.

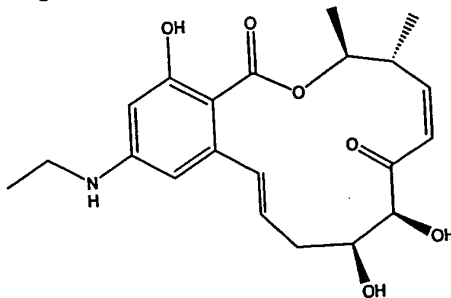
21. The compound of claim 18 or 20, wherein -CH=CH- is trans.

22. A compound having the structure:



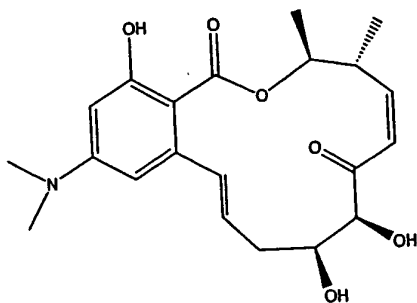
or pharmaceutically acceptable salt, ester, or salt of ester thereof.

23. A compound having the structure:



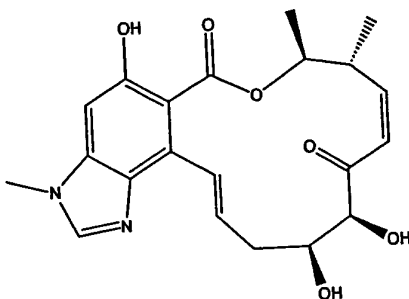
or pharmaceutically acceptable salt, ester, or salt of ester thereof.

24. A compound having the structure:



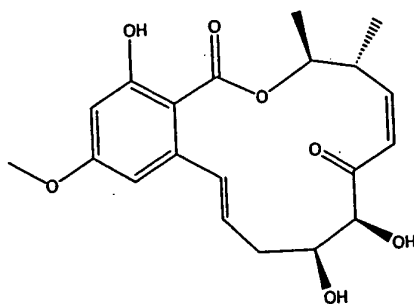
or pharmaceutically acceptable salt, ester, or salt of ester thereof.

25. A compound having the structure:



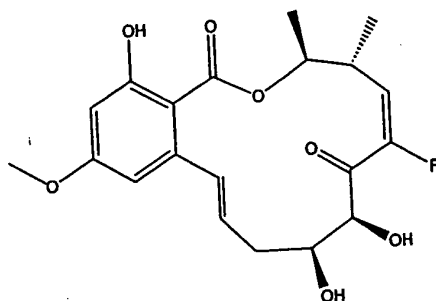
or pharmaceutically acceptable salt, ester, or salt of ester thereof.

26. A compound having the structure:



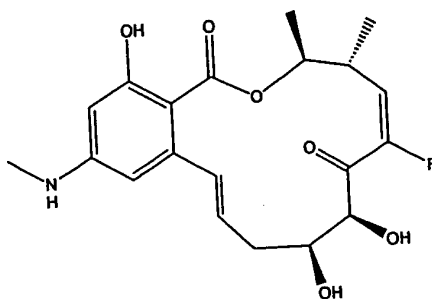
or pharmaceutically acceptable salt, ester, or salt of ester thereof.

27. A compound having the structure:



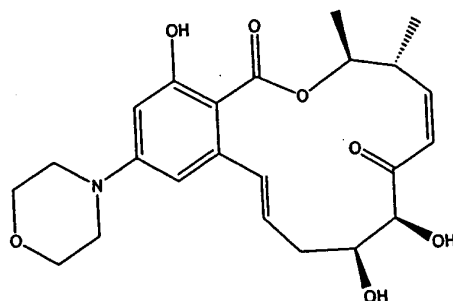
or pharmaceutically acceptable salt, ester, or salt of ester thereof.

28. A compound having the structure:



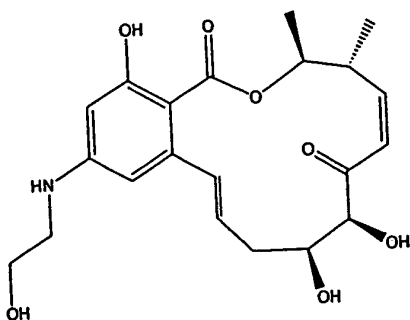
or pharmaceutically acceptable salt, ester, or salt of ester thereof.

29. A compound having the structure:



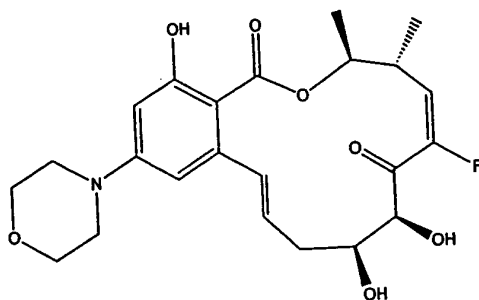
or pharmaceutically acceptable salt, ester, or salt of ester thereof.

30. A compound having the structure:



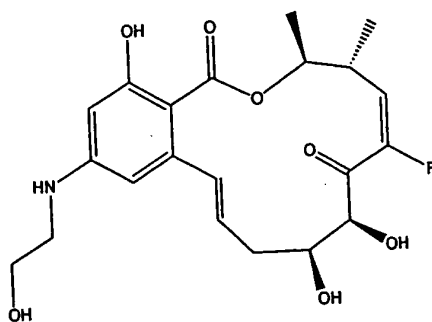
or pharmaceutically acceptable salt, ester, or salt of ester thereof.

31. A compound having the structure:



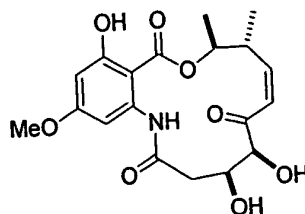
or pharmaceutically acceptable salt, ester, or salt of ester thereof.

32. A compound having the structure:



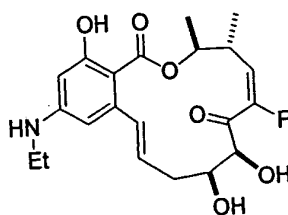
or pharmaceutically acceptable salt, ester, or salt of ester thereof.

33. A compound having the structure:



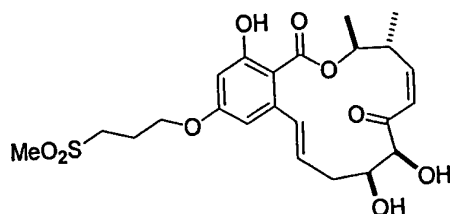
or pharmaceutically acceptable salt, ester, or salt of ester thereof.

34. A compound having the structure:



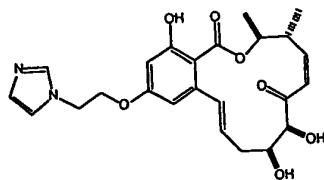
or pharmaceutically acceptable salt, ester, or salt of ester thereof.

35. A compound having the structure:



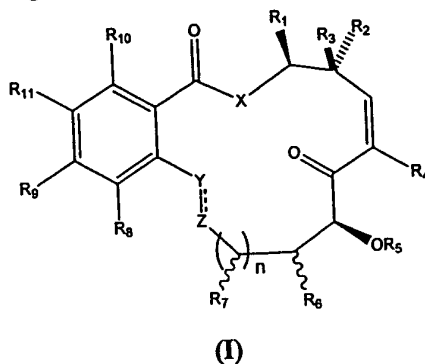
or pharmaceutically acceptable salt, ester, or salt of ester thereof.

36. A compound having the structure:



or pharmaceutically acceptable salt, ester, or salt of ester thereof.

37. A pharmaceutical composition comprising:
a compound having the structure:



or pharmaceutically acceptable salt, ester, or salt of ester thereof;
wherein R_1 is hydrogen, aliphatic, heteroaliphatic, alicyclic, heteroalicyclic,
aryl or heteroaryl;

R_2 and R_3 are each independently hydrogen, halogen, hydroxyl, protected
hydroxyl, or an aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl
moiety; or

R_1 and R_2 , when taken together, may form a substituted or unsubstituted,
saturated or unsaturated cyclic ring of 3 to 8 carbon atoms; or

R_1 and R_3 , when taken together, may form a substituted or unsubstituted,
saturated or unsaturated cyclic ring of 3 to 8 carbon atoms;

R_4 is hydrogen or halogen;

R_5 is hydrogen, an oxygen protecting group or a prodrug;

R_6 is hydrogen, hydroxyl, or protected hydroxyl;

n is 0-2;

R_7 , for each occurrence, is independently hydrogen, hydroxyl, or protected hydroxyl;

R_8 is hydrogen, halogen, hydroxyl, protected hydroxyl, alkyloxy, or an aliphatic moiety optionally substituted with hydroxyl, protected hydroxyl, SR_{12} , or $NR_{12}R_{13}$;

R_9 is hydrogen, halogen, hydroxyl, protected hydroxyl, OR_{12} , SR_{12} , $NR_{12}R_{13}$, $-X_1(CH_2)_pX_2-R_{14}$, or is C_{1-6} alkyl optionally substituted with hydroxyl, protected hydroxyl, halogen, amino, protected amino, or $-X_1(CH_2)_pX_2-R_{14}$;

wherein R_{12} and R_{13} are, independently for each occurrence, hydrogen, aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl; or a protecting group, or R_{12} and R_{13} , taken together may form a saturated or unsaturated cyclic ring containing 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms, and each of R_{12} and R_{13} are optionally further substituted with one or more occurrences of hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen,

wherein X_1 and X_2 are each independently absent, or are oxygen, NH, or $-N(alkyl)$, or wherein X_2-R_{14} together are N_3 or are a saturated or unsaturated heterocyclic moiety,

p is 2-10, and

R_{14} is hydrogen, or an aryl, heteroaryl, alkylaryl, or alkylheteroaryl moiety, or is $-(C=O)NHR_{15}$, $-(C=O)OR_{15}$, or $-(C=O)R_{15}$, wherein each occurrence of R_{15} is independently hydrogen, aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl; or R_{14} is $-SO_2(R_{16})$, wherein R_{16} is an aliphatic moiety, wherein one or more of R_{14} , R_{15} , or R_{16} are optionally substituted with one or more occurrences of hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen; or

R_8 and R_9 may, when taken together, form a saturated or unsaturated cyclic ring containing 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms and is optionally substituted with hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen;

R_{10} is hydrogen, hydroxyl, protected hydroxyl, amino, or protected amino;

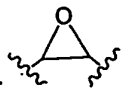
R_{11} is hydrogen, hydroxyl or protected hydroxyl;

X is absent or is O, NH, N-alkyl, CH_2 or S;

Y is CHR_{17} , O, $\text{C}=\text{O}$, CR_{17} or NR_{17} ; and Z is CHR_{18} , O, $\text{C}=\text{O}$, CR_{18} or NR_{18} , wherein each occurrence of R_{17} and R_{18} is independently hydrogen or aliphatic, or R_{17} and R_{18} taken together is $-\text{O}-$, $-\text{CH}_2-$ or $-\text{NR}_{19}-$, wherein R_{19} is hydrogen or C_{1-6} alkyl, and Y and Z may be connected by a single or double bond; and

a pharmaceutically acceptable carrier;

with the proviso that when n is 1; X is O; R_1 is methyl; R_2 , R_3 , R_7 and R_{11} are each hydrogen; R_5 is hydrogen, C_{1-4} alkyl or $-\text{C}(=\text{O})\text{C}_{1-4}$ alkyl; R_6 is hydrogen, OH, C_{1-4} alkoxy or $-\text{OC}(=\text{O})\text{C}_{1-4}$ alkyl; and R_9 is OH, C_{1-4} alkoxy or $-\text{OC}(=\text{O})\text{C}_{1-4}$ alkyl; then one or more if the following groups do not occur simultaneously as defined:

- (i) R_4 is hydrogen; R_{10} and R_8 are independently OH, C_{1-4} alkoxy or $-\text{OC}(=\text{O})\text{C}_{1-4}$ alkyl; and Y-Z is $-\text{CH}_2\text{CH}_2-$ or $-\text{CH}=\text{CH}-$;
- (ii) R_4 and R_8 are each hydrogen; R_{10} is OH, C_{1-4} alkoxy or $-\text{OC}(=\text{O})\text{C}_{1-4}$ alkyl; and Y-Z is $-\text{CHR}^Y\text{CHR}^Z-$, $-\text{CH}=\text{CH}-$ or ; wherein

- (iii) R_4 and R_{10} are each hydrogen, OH, C_{1-4} alkoxy or $-\text{OC}(=\text{O})\text{C}_{1-4}$ alkyl; R_8 is hydrogen, OH, halogen, C_{1-4} alkoxy or $-\text{OC}(=\text{O})\text{C}_{1-4}$ alkyl; and Y-Z is $-\text{CH}_2\text{CH}_2-$, $-\text{CH}=\text{CH}-$ or $-\text{C}(=\text{O})\text{CH}_2-$.

38. The pharmaceutical composition of claim 37, wherein the compound is present in an amount effective to inhibit NF- κ B activation.

39. The pharmaceutical composition of claim 37, wherein the compound is present in an amount effective to inhibit AP-1 activation.

40. The pharmaceutical composition of claim 37, wherein the compound is present in an amount effective to inhibit a protein kinase.

41. The pharmaceutical composition of claim 39, wherein the protein kinase is MEKK1, MEK1, VEGFr or PDGFr.

42. The pharmaceutical composition of claim 37, wherein the compound is present in an amount effective to inhibit proliferation of cancerous cells and angiogenesis on solid tumors.

43. The pharmaceutical composition of claim 37, wherein the compound is present in an amount effective to have an anti-inflammatory effect.

44. The pharmaceutical composition of claim 37, wherein the compound is present in an amount effective to treat psoriasis.

45. The pharmaceutical composition of claim 37, wherein the compound is present in an amount effective to reduce skin photodamage.

46. The pharmaceutical composition of claim 37, wherein the compound is present in an amount effective to prevent restenosis.

47. The pharmaceutical composition of claim 37, where:

R_1 is hydrogen, straight or branched C_{1-6} alkyl, straight or branched C_{1-6} heteroalkyl, or aryl,

wherein the alkyl, heteroalkyl, and aryl groups may optionally be substituted with one or more occurrences of halogen, hydroxyl or protected hydroxyl;

R_2 and R_3 are each independently hydrogen, halogen, hydroxyl, protected hydroxyl, straight or branched C_{1-6} alkyl, straight or branched C_{1-6} heteroalkyl, or aryl,

wherein the alkyl, heteroalkyl, and aryl groups may optionally be substituted with one or more occurrences of halogen, hydroxyl or protected hydroxyl; or

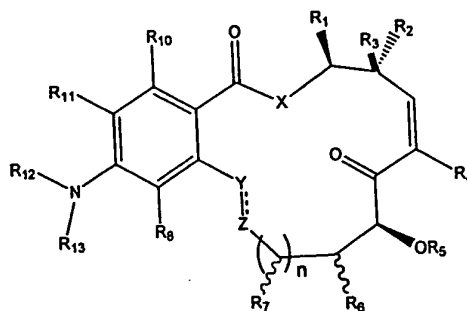
R_1 and R_2 , when taken together, may form a saturated or unsaturated cyclic ring of 3 to 8 carbon atoms, optionally substituted with one or more occurrences of halogen; or

R_1 and R_3 , when taken together, may form a saturated or unsaturated cyclic ring of 3 to 8 carbon atoms, optionally substituted with one or more occurrences of halogen;

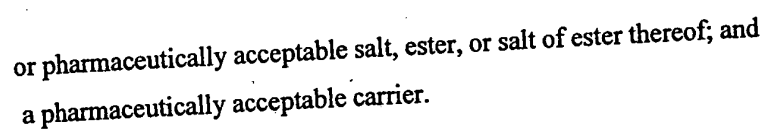
R_4 is hydrogen or halogen;
 R_5 is hydrogen or a protecting group;
 R_6 is hydrogen, hydroxyl, or protected hydroxyl;
 n is 0-2;
 R_7 , for each occurrence, is independently hydrogen, hydroxyl, or protected hydroxyl;
 R_8 is hydrogen, halogen, hydroxyl, protected hydroxyl, alkyloxy, or C_{1-6} alkyl optionally substituted with hydroxyl, protected hydroxyl, SR_{12} , or $NR_{12}R_{13}$;
 R_9 is hydrogen, halogen, hydroxyl, protected hydroxyl, OR_{12} , SR_{12} , $NR_{12}R_{13}$, $-X_1(CH_2)_pX_2-R_{14}$, or is C_{1-6} alkyl optionally substituted with hydroxyl, protected hydroxyl, halogen, amino, protected amino, or $-X_1(CH_2)_pX_2-R_{14}$;
 wherein R_{12} and R_{13} are, independently for each occurrence, hydrogen, C_{1-6} alkyl, aryl, heteroaryl, alkylaryl, or alkylheteroaryl, or a protecting group, or R_{12} and R_{13} , taken together may form a saturated or unsaturated cyclic ring containing 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms, and each of R_{12} and R_{13} are optionally further substituted with one or more occurrences of hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen,
 wherein X_1 and X_2 are each independently absent, or are oxygen, NH, or -N(alkyl), or wherein X_2-R_{14} together are N_3 or are a saturated or unsaturated heterocyclic moiety,
 p is 2-10, and
 R_{14} is hydrogen, or an aryl, heteroaryl, alkylaryl, or alkylheteroaryl moiety, or is $-(C=O)NHR_{15}$, $-(C=O)OR_{15}$, or $-(C=O)R_{15}$, wherein each occurrence of R_{15} is independently hydrogen, alkyl, heteroalkyl, aryl, heteroaryl, alkylaryl, or alkylheteroaryl, or R_{14} is $-SO_2(R_{16})$, wherein R_{16} is an alkyl moiety, wherein one or more of R_{14} , R_{15} , or R_{16} are optionally substituted with one or more occurrences of hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen; or
 R_8 and R_9 may, when taken together, form a saturated or unsaturated cyclic ring containing 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms and is optionally substituted with hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen;

R_{10} is hydrogen, hydroxyl, protected hydroxyl, amino, or protected amino;
 R_{11} is hydrogen, hydroxyl or protected hydroxyl;
 X is absent or is O, NH, N-alkyl, CH_2 or S;
 Y is CHR_{17} , O, $C=O$, CR_{17} or NR_{17} ; and Z is CHR_{18} , O, $C=O$, CR_{18} or NR_{18} , wherein each occurrence of R_{17} and R_{18} is independently hydrogen or C_{1-6} alkyl, or R_{17} and R_{18} taken together is $-O-$, $-CH_2-$ or $-NR_{19}-$, wherein R_{19} is hydrogen or C_{1-6} alkyl, and Y and Z may be connected by a single or double bond.

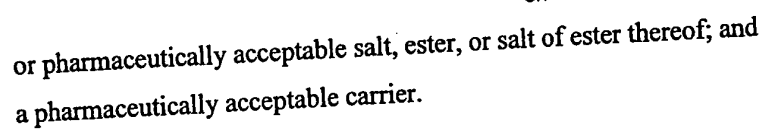
48. The pharmaceutical composition of claim 47, where X is oxygen and n is 1.
49. The pharmaceutical composition of claim 47, where R_4 is halogen.
50. The pharmaceutical composition of claim 49, where R_4 is fluorine.
51. The pharmaceutical composition of claim 47, where Y and Z together represent $-CH=CH-$.
52. The pharmaceutical composition of claim 51, wherein $-CH=CH-$ is trans.



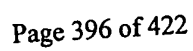
- wherein R_1 - R_{13} , n , X , Y and Z are as defined in claim 46, or
- R_{13} and R_8 may, when taken together, form a cyclic ring containing 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms and is optionally substituted with hydrogen, alkyloxy, amino, alkylamino, aminoalkyl, and halogen.
60. The pharmaceutical composition of claim 59, wherein X is oxygen and n is 1.
 61. The pharmaceutical composition of claim 59, wherein R_4 is halogen.
 62. The pharmaceutical composition of claim 59, wherein Y and Z together represent $-\text{CH}=\text{CH}-$.
 63. The pharmaceutical composition of claim 59, wherein R_1 and R_2 are each methyl and R_3 is hydrogen.
 64. The pharmaceutical composition of claim 59 wherein X is oxygen, n is 1, R_1 and R_2 are each methyl, R_3 is hydrogen, R_4 is halogen, and Y and Z together represent $-\text{CH}=\text{CH}-$.
 65. The pharmaceutical composition of claim 63 or 64 wherein $-\text{CH}=\text{CH}-$ is trans.
 66. A pharmaceutical composition comprising:
a compound having the structure:



67. A pharmaceutical composition comprising:
a compound having the structure:

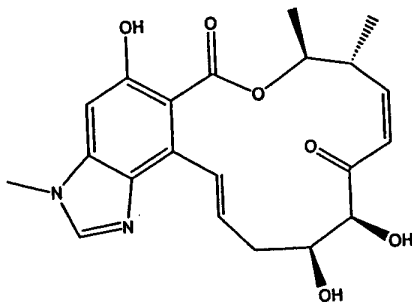


68. A pharmaceutical composition comprising:
a compound having the structure:



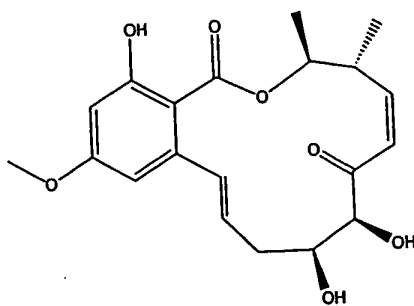
or pharmaceutically acceptable salt, ester, or salt of ester thereof; and
a pharmaceutically acceptable carrier.

69. A pharmaceutical composition comprising:
a compound having the structure:



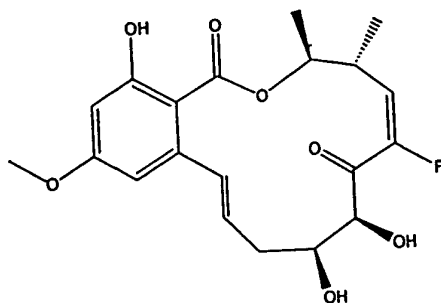
or pharmaceutically acceptable salt, ester, or salt of ester thereof; and
a pharmaceutically acceptable carrier.

70. A pharmaceutical composition comprising:
a compound having the structure:



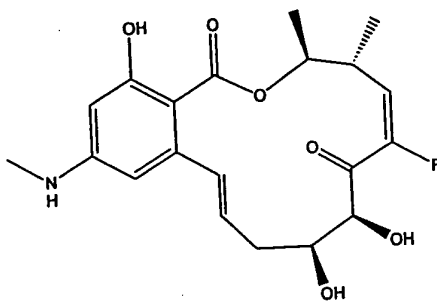
or pharmaceutically acceptable salt, ester, or salt of ester thereof; and
a pharmaceutically acceptable carrier.

71. A pharmaceutical composition comprising:
a compound having the structure:



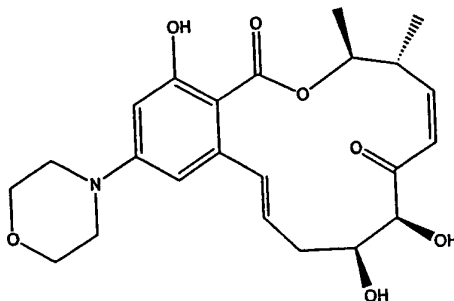
or pharmaceutically acceptable salt, ester, or salt of ester thereof; and
a pharmaceutically acceptable carrier.

72. A pharmaceutical composition comprising:
a compound having the structure:



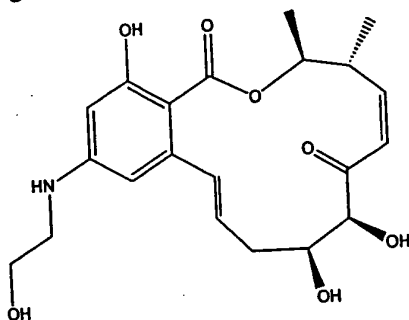
or pharmaceutically acceptable salt, ester, or salt of ester thereof; and
a pharmaceutically acceptable carrier.

73. A pharmaceutical composition comprising:
a compound having the structure:



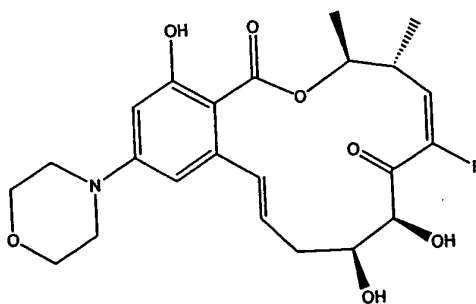
or pharmaceutically acceptable salt, ester, or salt of ester thereof; and
a pharmaceutically acceptable carrier.

74. A pharmaceutical composition comprising:
a compound having the structure:



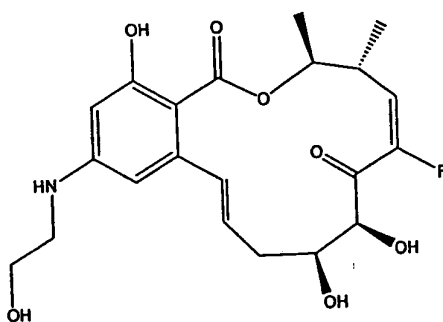
or pharmaceutically acceptable salt, ester, or salt of ester thereof; and
a pharmaceutically acceptable carrier.

75. A pharmaceutical composition comprising:
a compound having the structure:



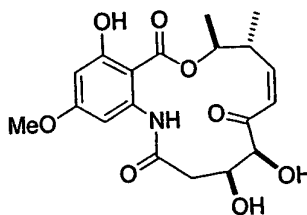
or pharmaceutically acceptable salt, ester, or salt of ester thereof; and
a pharmaceutically acceptable carrier.

76. A pharmaceutical composition comprising:
a compound having the structure:



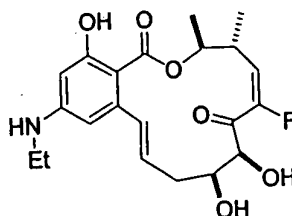
or pharmaceutically acceptable salt, ester, or salt of ester thereof; and
a pharmaceutically acceptable carrier.

77. A pharmaceutical composition comprising:
a compound having the structure:



or pharmaceutically acceptable salt, ester, or salt of ester thereof; and
a pharmaceutically acceptable carrier.

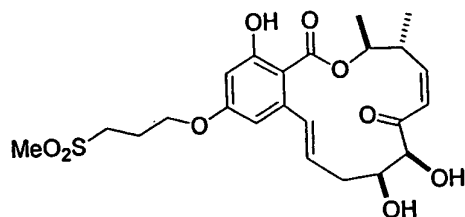
78. A pharmaceutical composition comprising:
a compound having the structure:



or pharmaceutically acceptable salt, ester, or salt of ester thereof; and
a pharmaceutically acceptable carrier.

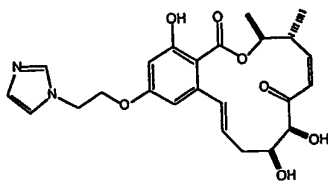
79. A pharmaceutical composition comprising:

a compound having the structure:



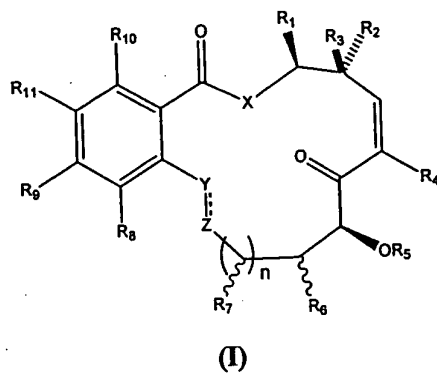
or pharmaceutically acceptable salt, ester, or salt of ester thereof; and
a pharmaceutically acceptable carrier.

80. A pharmaceutical composition comprising:
a compound having the structure:



or pharmaceutically acceptable salt, ester, or salt of ester thereof; and
a pharmaceutically acceptable carrier.

81. A topical pharmaceutical composition for preventing or treating UVB-induced
photodamage comprising:
a compound having the structure:



or pharmaceutically acceptable salt, ester, or salt of ester thereof;
wherein R_1 is hydrogen, straight or branched C_{1-6} alkyl, straight or branched C_{1-6} heteroalkyl, or aryl,

wherein the alkyl, heteroalkyl, and aryl groups may optionally be substituted with one or more occurrences of halogen, hydroxyl or protected hydroxyl;

R_2 and R_3 are each independently hydrogen, halogen, hydroxyl, protected hydroxyl, straight or branched C_{1-6} alkyl, straight or branched C_{1-6} heteroalkyl, or aryl,

wherein the alkyl, heteroalkyl, and aryl groups may optionally be substituted with one or more occurrences of halogen, hydroxyl or protected hydroxyl; or

R_1 and R_2 , when taken together, may form a saturated or unsaturated cyclic ring of 3 to 8 carbon atoms, optionally substituted with one or more occurrences of halogen; or

R_1 and R_3 , when taken together, may form a saturated or unsaturated cyclic ring of 3 to 8 carbon atoms, optionally substituted with one or more occurrences of halogen;

R_4 is hydrogen or halogen;

R_5 is hydrogen or a protecting group;

R_6 is hydrogen, hydroxyl, or protected hydroxyl;

n is 0-2;

R_7 , for each occurrence, is independently hydrogen, hydroxyl, or protected hydroxyl;

R_8 is hydrogen, halogen, hydroxyl, protected hydroxyl, alkyloxy, or C_{1-6} alkyl optionally substituted with hydroxyl, protected hydroxyl, SR_{12} , or $NR_{12}R_{13}$;

R_9 is hydrogen, halogen, hydroxyl, protected hydroxyl, OR_{12} , SR_{12} , $NR_{12}R_{13}$, $-X_1(CH_2)_pX_2-R_{14}$, or is C_{1-6} alkyl optionally substituted with hydroxyl, protected hydroxyl, halogen, amino, protected amino, or $-X_1(CH_2)_pX_2-R_{14}$;

wherein R_{12} and R_{13} are, independently for each occurrence, hydrogen, C_{1-6} alkyl, aryl, heteroaryl, alkylaryl, or alkylheteroaryl, or a protecting group, or R_{12} and R_{13} , taken together may form a saturated or unsaturated cyclic ring containing 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms, and each of R_{12} and R_{13} are optionally further substituted with one or more occurrences

of hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen,

wherein X_1 and X_2 are each independently absent, or are oxygen, NH, or -N(alkyl), or wherein X_2 - R_{14} together are N_3 or are a saturated or unsaturated heterocyclic moiety,

p is 2-10, and

R_{14} is hydrogen, or an aryl, heteroaryl, alkylaryl, or alkylheteroaryl moiety, or is $-(C=O)NHR_{15}$, $-(C=O)OR_{15}$, or $-(C=O)R_{15}$, wherein each occurrence of R_{15} is independently hydrogen, alkyl, heteroalkyl, aryl, heteroaryl, alkylaryl, or alkylheteroaryl, or R_{14} is $-SO_2(R_{16})$, wherein R_{16} is an alkyl moiety, wherein one or more of R_{14} , R_{15} , or R_{16} are optionally substituted with one or more occurrences of hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen; or

R_8 and R_9 may, when taken together, form a saturated or unsaturated cyclic ring containing 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms and is optionally substituted with hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen;

R_{10} is hydrogen, hydroxyl, protected hydroxyl, amino, or protected amino;

R_{11} is hydrogen, hydroxyl or protected hydroxyl;

X is absent or is O, NH, N-alkyl, CH_2 or S;

Y is CHR_{17} , O, $C=O$, CR_{17} or NR_{17} ; and Z is CHR_{18} , O, $C=O$, CR_{18} or NR_{18} , wherein each occurrence of R_{17} and R_{18} is independently hydrogen or C_{1-6} alkyl, or R_{17} and R_{18} taken together is $-O-$, $-CH_2-$ or $-NR_{19}-$, wherein R_{19} is hydrogen or C_{1-6} alkyl, and Y and Z may be connected by a single or double bond; and

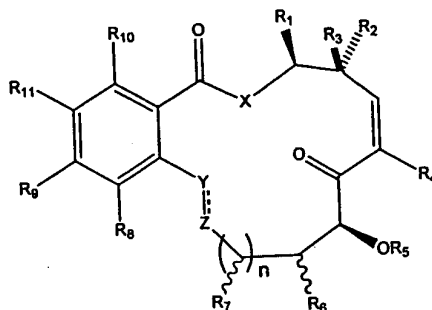
a pharmaceutically acceptable carrier;

wherein the compound is present in an amount effective to prevent or treat UVB-induced photodamage.

82. The pharmaceutical composition of claim 81, further comprising a cosmetic ingredient.

83. The pharmaceutical composition of claim 82, wherein the cosmetic ingredient is a sunscreen.

84. A method for treating an inflammatory and/or autoimmune disorder or a disorder resulting from increased angiogenesis and/or cell proliferation comprising:
 administering to a subject in need thereof a therapeutically effective amount of
 a compound having the structure:



(I)

or pharmaceutically acceptable salt, ester, or salt of ester thereof;

wherein R_1 is hydrogen, aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl;

R_2 and R_3 are each independently hydrogen, halogen, hydroxyl, protected hydroxyl, or an aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl moiety; or

R_1 and R_2 , when taken together, may form a substituted or unsubstituted, saturated or unsaturated cyclic ring of 3 to 8 carbon atoms; or

R_1 and R_3 , when taken together, may form a substituted or unsubstituted, saturated or unsaturated cyclic ring of 3 to 8 carbon atoms;

R_4 is hydrogen or halogen;

R_5 is hydrogen, an oxygen protecting group or a prodrug;

R_6 is hydrogen, hydroxyl, or protected hydroxyl;

n is 0-2;

R_7 , for each occurrence, is independently hydrogen, hydroxyl, or protected hydroxyl;

R_8 is hydrogen, halogen, hydroxyl, protected hydroxyl, alkyloxy, or an aliphatic moiety optionally substituted with hydroxyl, protected hydroxyl, SR_{12} , or $NR_{12}R_{13}$;

R_9 is hydrogen, halogen, hydroxyl, protected hydroxyl, OR_{12} , SR_{12} , $NR_{12}R_{13}$, $-X_1(CH_2)_pX_2-R_{14}$, or is C_{1-6} alkyl optionally substituted with hydroxyl, protected hydroxyl, halogen, amino, protected amino, or $-X_1(CH_2)_pX_2-R_{14}$;

wherein R_{12} and R_{13} are, independently for each occurrence, hydrogen, aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl; or a protecting group, or R_{12} and R_{13} , taken together may form a saturated or unsaturated cyclic ring containing 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms, and each of R_{12} and R_{13} are optionally further substituted with one or more occurrences of hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen,

wherein X_1 and X_2 are each independently absent, or are oxygen, NH, or $-N(alkyl)$, or wherein X_2-R_{14} together are N_3 or are a saturated or unsaturated heterocyclic moiety,

p is 2-10, and

R_{14} is hydrogen, or an aryl, heteroaryl, alkylaryl, or alkylheteroaryl moiety, or is $-(C=O)NHR_{15}$, $-(C=O)OR_{15}$, or $-(C=O)R_{15}$, wherein each occurrence of R_{15} is independently hydrogen, aliphatic, heteroaliphatic, alicyclic, heteroalicyclic, aryl or heteroaryl; or R_{14} is $-SO_2(R_{16})$, wherein R_{16} is an aliphatic moiety, wherein one or more of R_{14} , R_{15} , or R_{16} are optionally substituted with one or more occurrences of hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen; or R_8 and R_9 may, when taken together, form a saturated or unsaturated cyclic ring containing 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms and is optionally substituted with hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen;

R_{10} is hydrogen, hydroxyl, protected hydroxyl, amino, or protected amino;

R_{11} is hydrogen, hydroxyl or protected hydroxyl;

X is absent or is O, NH, N-alkyl, CH_2 or S;

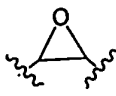
Y is CHR_{17} , O, $C=O$, CR_{17} or NR_{17} ; and Z is CHR_{18} , O, $C=O$, CR_{18} or NR_{18} ,

wherein each occurrence of R_{17} and R_{18} is independently hydrogen or aliphatic, or R_{17} and R_{18} taken together is $-O-$, $-CH_2-$ or $-NR_{19}-$, wherein R_{19} is hydrogen or C_{1-6} alkyl, and Y and Z may be connected by a single or double bond; and

a pharmaceutically acceptable carrier or diluent;

with the proviso that when n is 1; X is O; R₁ is methyl; R₂, R₃, R₇ and R₁₁ are each hydrogen; R₅ is hydrogen, C₁₋₄alkyl or -C(=O)C₁₋₄alkyl; R₆ is hydrogen, OH, C₁₋₄alkoxy or -OC(=O)C₁₋₄alkyl; and R₉ is OH, C₁₋₄alkoxy or -OC(=O)C₁₋₄alkyl; then one or more if the following groups do not occur simultaneously as defined:

- (i) R₄ is hydrogen; R₁₀ and R₈ are independently OH, C₁₋₄alkoxy or -OC(=O)C₁₋₄alkyl; and Y-Z is -CH₂CH₂- or -CH=CH-; and
- (ii) R₄ and R₈ are each hydrogen; R₁₀ is OH, C₁₋₄alkoxy or -OC(=O)C₁₋

₄alkyl; and Y-Z is -CHR^YCHR^Z-, -CH=CH- or ; wherein R^Y and R^Z are independently hydrogen, C₁₋₄alkyl or C₁₋₄alkanoyl; and

- (iii) R₄ and R₁₀ are each hydrogen, OH, C₁₋₄alkoxy or -OC(=O)C₁₋₄alkyl; R₈ is hydrogen, OH, halogen, C₁₋₄alkoxy or -OC(=O)C₁₋₄alkyl; and Y-Z is -CH₂CH₂-, -CH=CH- or -C(=O)CH₂-; whereby the compound induces mRNA degradation and the method is for treating a disorder resulting from cell proliferation.

85. The method of claim 84, wherein the method is for treating a disorder selected from the group consisting of rheumatoid arthritis, psoriasis, asthma, cancer, sepsis, inflammatory bowel disease, atopic dermatitis, Crohn's disease, and autoimmune disorders.

86. The method of claim 84, wherein the method is for treating rheumatoid arthritis.

87. The method of claim 84, wherein the method is for treating psoriasis.

88. The method of claim 84, wherein the method is for treating asthma.

89. The method of claim 84, wherein:

R₁ is hydrogen, straight or branched C₁₋₆alkyl, straight or branched C₁₋₆heteroalkyl, or aryl,

wherein the alkyl, heteroalkyl, and aryl groups may optionally be substituted with one or more occurrences of halogen, hydroxyl or protected hydroxyl;

R_2 and R_3 are each independently hydrogen, halogen, hydroxyl, protected hydroxyl, straight or branched C_{1-6} alkyl, straight or branched C_{1-6} heteroalkyl, or aryl,

wherein the alkyl, heteroalkyl, and aryl groups may optionally be substituted with one or more occurrences of halogen, hydroxyl or protected hydroxyl; or

R_1 and R_2 , when taken together, may form a saturated or unsaturated cyclic ring of 3 to 8 carbon atoms, optionally substituted with one or more occurrences of halogen; or

R_1 and R_3 , when taken together, may form a saturated or unsaturated cyclic ring of 3 to 8 carbon atoms, optionally substituted with one or more occurrences of halogen;

R_4 is hydrogen or halogen;

R_5 is hydrogen or a protecting group;

R_6 is hydrogen, hydroxyl, or protected hydroxyl;

n is 0-2;

R_7 , for each occurrence, is independently hydrogen, hydroxyl, or protected hydroxyl;

R_8 is hydrogen, halogen, hydroxyl, protected hydroxyl, alkyloxy, or C_{1-6} alkyl optionally substituted with hydroxyl, protected hydroxyl, SR_{12} , or $NR_{12}R_{13}$;

R_9 is hydrogen, halogen, hydroxyl, protected hydroxyl, OR_{12} , SR_{12} , $NR_{12}R_{13}$, $-X_1(CH_2)_pX_2-R_{14}$, or is C_{1-6} alkyl optionally substituted with hydroxyl, protected hydroxyl, halogen, amino, protected amino, or $-X_1(CH_2)_pX_2-R_{14}$;

wherein R_{12} and R_{13} are, independently for each occurrence, hydrogen, C_{1-6} alkyl, aryl, heteroaryl, alkylaryl, or alkylheteroaryl, or a protecting group, or R_{12} and R_{13} , taken together may form a saturated or unsaturated cyclic ring containing 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms, and each of R_{12} and R_{13} are optionally further substituted with one or more occurrences of hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen,

wherein X_1 and X_2 are each independently absent, or are oxygen, NH, or -N(alkyl), or wherein X_2 - R_{14} together are N_3 or are a saturated or unsaturated heterocyclic moiety,

p is 2-10, and

R_{14} is hydrogen, or an aryl, heteroaryl, alkylaryl, or alkylheteroaryl moiety, or is $-(C=O)NHR_{15}$, $-(C=O)OR_{15}$, or $-(C=O)R_{15}$, wherein each occurrence of R_{15} is independently hydrogen, alkyl, heteroalkyl, aryl, heteroaryl, alkylaryl, or alkylheteroaryl, or R_{14} is $-SO_2(R_{16})$, wherein R_{16} is an alkyl moiety, wherein one or more of R_{14} , R_{15} , or R_{16} are optionally substituted with one or more occurrences of hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen; or

R_8 and R_9 may, when taken together, form a saturated or unsaturated cyclic ring containing 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms and is optionally substituted with hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen;

R_{10} is hydrogen, hydroxyl, protected hydroxyl, amino, or protected amino;

R_{11} is hydrogen, hydroxyl or protected hydroxyl;

X is absent or is O, NH, N-alkyl, CH_2 or S;

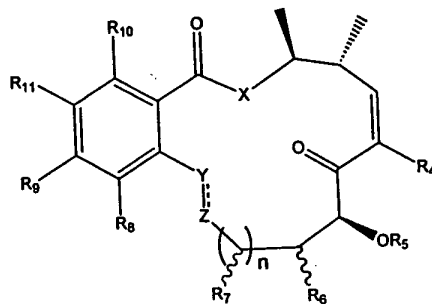
Y is CHR_{17} , O, $C=O$, CR_{17} or NR_{17} ; and Z is CHR_{18} , O, $C=O$, CR_{18} or NR_{18} ,

wherein each occurrence of R_{17} and R_{18} is independently hydrogen or C_{1-6} alkyl, or R_{17} and R_{18} taken together is $-O-$, $-CH_2-$ or $-NR_{19}-$, wherein R_{19} is hydrogen or C_{1-6} alkyl, and Y and Z may be connected by a single or double bond.

90. The method of claim 89, wherein in the compound X is oxygen and n is 1.
91. The method of claim 89, wherein in the compound R_4 is halogen.
92. The method of claim 89 is wherein in the compound R_4 is fluorine.
93. The method of claim 89, wherein in the compound Y and Z together represent $CH=CH-$

94. The method of claim 93, wherein in the compound Y and Z together represent $\text{trans}-\text{CH}=\text{CH}-$.

95. The method of claim 89, comprising administering a compound wherein R_1 and R_2 are each methyl and R_3 is hydrogen and the compound has the structure:



wherein R_4 - R_{11} , n , X , Y and Z are as defined in claim 88.

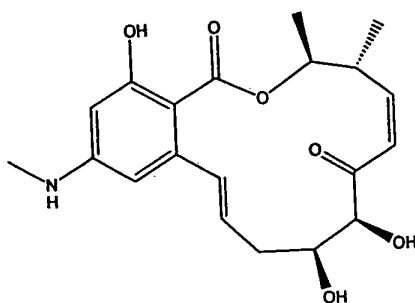
96. The method of claim 95, wherein in the compound X is oxygen and n is 1.

97. The method of claim 95, wherein in the compound R_4 is halogen.

106. The method of claim 101, wherein in the compound X is oxygen, n is 1, R₁ and R₂ are each methyl, R₃ is hydrogen, R₄ is halogen, and Y and Z together represent -CH=CH-.

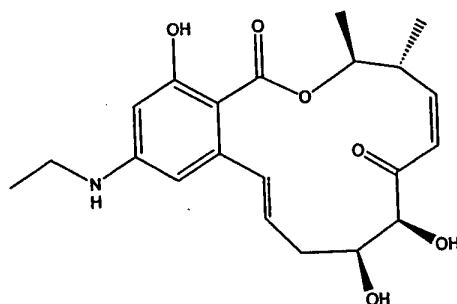
107. The method of claim 105 or 106, wherein in the compound -CH=CH- is trans.

108. The method of claim 84, comprising administering a compound having the structure:



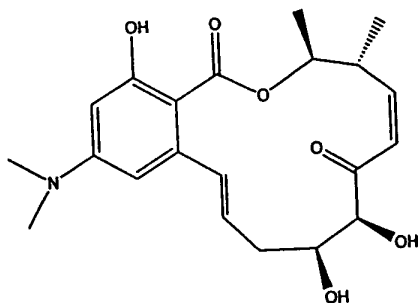
or pharmaceutically acceptable salt, ester, or salt of ester thereof.

109. The method of claim 84, comprising administering a compound having the structure:



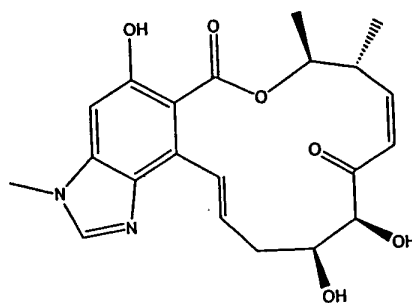
or pharmaceutically acceptable salt, ester, or salt of ester thereof.

110. The method of claim 84, comprising administering a compound having the structure:



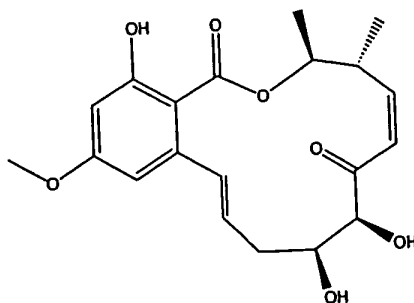
or pharmaceutically acceptable salt, ester, or salt of ester thereof.

111. The method of claim 84, comprising administering a compound having the structure:



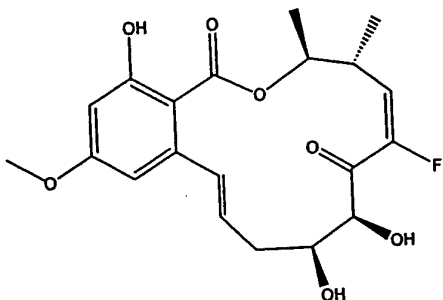
or pharmaceutically acceptable salt, ester, or salt of ester thereof.

112. The method of claim 84, comprising administering a compound having the structure:



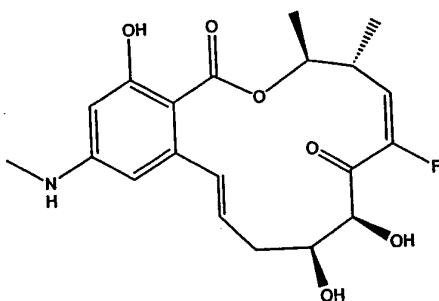
or pharmaceutically acceptable salt, ester, or salt of ester thereof.

113. The method of claim 84, comprising administering a compound having the structure:



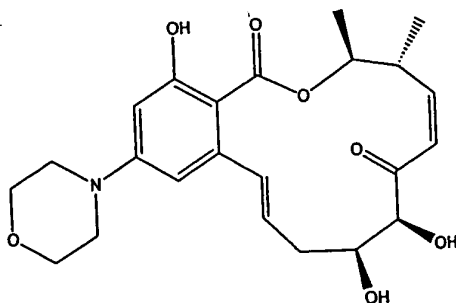
or pharmaceutically acceptable salt, ester, or salt of ester thereof.

114. The method of claim 84, comprising administering a compound having the structure:



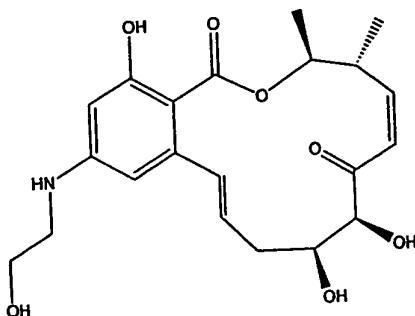
or pharmaceutically acceptable salt, ester, or salt of ester thereof.

115. The method of claim 84, comprising administering a compound having the structure:



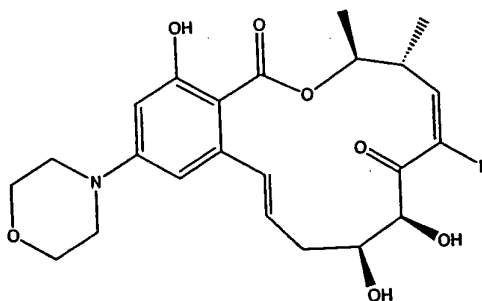
or pharmaceutically acceptable salt, ester, or salt of ester thereof.

116. The method of claim 84, comprising administering a compound having the structure:



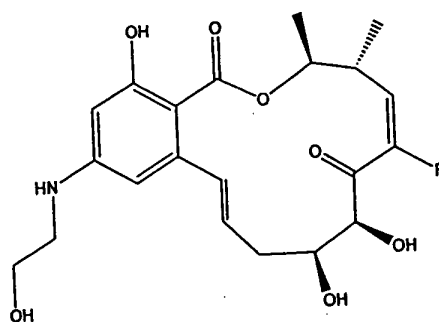
or pharmaceutically acceptable salt, ester, or salt of ester thereof.

117. The method of claim 84, comprising administering a compound having the structure:



or pharmaceutically acceptable salt, ester, or salt of ester thereof.

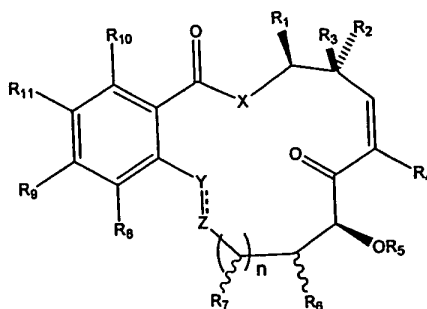
118. The method of claim 84, comprising administering a compound having the structure:



or pharmaceutically acceptable salt, ester, or salt of ester thereof.

119. A method for providing protection against UVB-induced photodamage to a subject, said method comprising:

Administering to the subject in need thereof a composition comprising a compound having the structure:



(I)

or pharmaceutically acceptable salt, ester, or salt of ester thereof;

wherein R_1 is hydrogen, straight or branched C_{1-6} alkyl, straight or branched C_{1-6} heteroalkyl, or aryl,

wherein the alkyl, heteroalkyl, and aryl groups may optionally be substituted with one or more occurrences of halogen, hydroxyl or protected hydroxyl;

R_2 and R_3 are each independently hydrogen, halogen, hydroxyl, protected hydroxyl, straight or branched C_{1-6} alkyl, straight or branched C_{1-6} heteroalkyl, or aryl,

wherein the alkyl, heteroalkyl, and aryl groups may optionally be substituted with one or more occurrences of halogen, hydroxyl or protected hydroxyl; or

R₁ and R₂, when taken together, may form a saturated or unsaturated cyclic ring of 3 to 8 carbon atoms, optionally substituted with one or more occurrences of halogen; or

R₁ and R₃, when taken together, may form a saturated or unsaturated cyclic ring of 3 to 8 carbon atoms, optionally substituted with one or more occurrences of halogen;

R₄ is hydrogen or halogen;

R₅ is hydrogen or a protecting group;

R₆ is hydrogen, hydroxyl, or protected hydroxyl;

n is 0-2;

R₇, for each occurrence, is independently hydrogen, hydroxyl, or protected hydroxyl;

R₈ is hydrogen, halogen, hydroxyl, protected hydroxyl, alkyloxy, or C₁₋₆alkyl optionally substituted with hydroxyl, protected hydroxyl, SR₁₂, or NR₁₂R₁₃;

R₉ is hydrogen, halogen, hydroxyl, protected hydroxyl, OR₁₂, SR₁₂, NR₁₂R₁₃, -X₁(CH₂)_pX₂-R₁₄, or is C₁₋₆alkyl optionally substituted with hydroxyl, protected hydroxyl, halogen, amino, protected amino, or -X₁(CH₂)_pX₂-R₁₄;

wherein R₁₂ and R₁₃ are, independently for each occurrence, hydrogen, C₁₋₆alkyl, aryl, heteroaryl, alkylaryl, or alkylheteroaryl, or a protecting group, or R₁₂ and R₁₃, taken together may form a saturated or unsaturated cyclic ring containing 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms, and each of R₁₂ and R₁₃ are optionally further substituted with one or more occurrences of hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen,

wherein X₁ and X₂ are each independently absent, or are oxygen, NH, or -N(alkyl), or wherein X₂-R₁₄ together are N₃ or are a saturated or unsaturated heterocyclic moiety,

p is 2-10, and

R₁₄ is hydrogen, or an aryl, heteroaryl, alkylaryl, or alkylheteroaryl moiety, or is -(C=O)NHR₁₅-(C=O)OR₁₅, or -(C=O)R₁₅, wherein each

occurrence of R_{15} is independently hydrogen, alkyl, heteroalkyl, aryl, heteroaryl, alkylaryl, or alkylheteroaryl, or R_{14} is $-SO_2(R_{16})$, wherein R_{16} is an alkyl moiety, wherein one or more of R_{14} , R_{15} , or R_{16} are optionally substituted with one or more occurrences of hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen; or R_8 and R_9 may, when taken together, form a saturated or unsaturated cyclic ring containing 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms and is optionally substituted with hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen;

R_{10} is hydrogen, hydroxyl, protected hydroxyl, amino, or protected amino;

R_{11} is hydrogen, hydroxyl or protected hydroxyl;

X is absent or is O, NH, N-alkyl, CH_2 or S;

Y is CHR_{17} , O, $C=O$, CR_{17} or NR_{17} ; and Z is CHR_{18} , O, $C=O$, CR_{18} or NR_{18} , wherein each occurrence of R_{17} and R_{18} is independently hydrogen or C_{1-6} alkyl, or R_{17} and R_{18} taken together is $-O-$, $-CH_2-$ or $-NR_{19}-$, wherein R_{19} is hydrogen or C_{1-6} alkyl, and Y and Z may be connected by a single or double bond; and

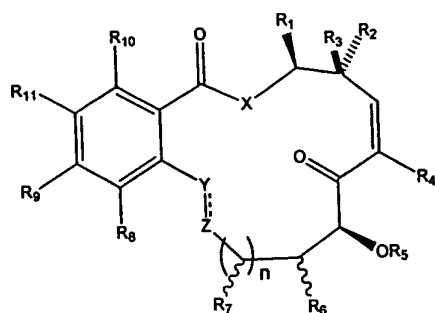
a pharmaceutically acceptable carrier or diluent.

120. The method of claim 119, wherein in the step of administering, the composition is administered topically.

121. The method of claim 119, wherein the photodamage is skin wrinkles.

122. The method of claim 119, wherein the photodamage is a skin cancer.

123. A method for preventing or reducing the rate of restenosis, comprising:
 inserting a stent into an obstructed blood vessel, the stent having a generally tubular structure, the surface of the structure being coated with (or otherwise adapted to release) a composition comprising a compound having the structure:



(I)

or pharmaceutically acceptable salt, ester, or salt of ester thereof;

wherein R₁ is hydrogen, straight or branched C₁₋₆alkyl, straight or branched C₁₋₆heteroalkyl, or aryl,

wherein the alkyl, heteroalkyl, and aryl groups may optionally be substituted with one or more occurrences of halogen, hydroxyl or protected hydroxyl;

R₂ and R₃ are each independently hydrogen, halogen, hydroxyl, protected hydroxyl, straight or branched C₁₋₆alkyl, straight or branched C₁₋₆heteroalkyl, or aryl,

wherein the alkyl, heteroalkyl, and aryl groups may optionally be substituted with one or more occurrences of halogen, hydroxyl or protected hydroxyl; or

R₁ and R₂, when taken together, may form a saturated or unsaturated cyclic ring of 3 to 8 carbon atoms, optionally substituted with one or more occurrences of halogen; or

R₁ and R₃, when taken together, may form a saturated or unsaturated cyclic ring of 3 to 8 carbon atoms, optionally substituted with one or more occurrences of halogen;

R₄ is hydrogen or halogen;

R₅ is hydrogen or a protecting group;

R₆ is hydrogen, hydroxyl, or protected hydroxyl;

n is 0-2;

R₇, for each occurrence, is independently hydrogen, hydroxyl, or protected hydroxyl;

R₈ is hydrogen, halogen, hydroxyl, protected hydroxyl, alkyloxy, or C₁₋₆alkyl optionally substituted with hydroxyl, protected hydroxyl, SR₁₂, or NR₁₂R₁₃;

R_9 is hydrogen, halogen, hydroxyl, protected hydroxyl, OR_{12} , SR_{12} , $NR_{12}R_{13}$, $-X_1(CH_2)_pX_2-R_{14}$, or is C_{1-6} alkyl optionally substituted with hydroxyl, protected hydroxyl, halogen, amino, protected amino, or $-X_1(CH_2)_pX_2-R_{14}$;

wherein R_{12} and R_{13} are, independently for each occurrence, hydrogen, C_{1-6} alkyl, aryl, heteroaryl, alkylaryl, or alkylheteroaryl, or a protecting group, or R_{12} and R_{13} , taken together may form a saturated or unsaturated cyclic ring containing 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms, and each of R_{12} and R_{13} are optionally further substituted with one or more occurrences of hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen,

wherein X_1 and X_2 are each independently absent, or are oxygen, NH, or $-N(alkyl)$, or wherein X_2-R_{14} together are N_3 or are a saturated or unsaturated heterocyclic moiety,

p is 2-10, and

R_{14} is hydrogen, or an aryl, heteroaryl, alkylaryl, or alkylheteroaryl moiety, or is $-(C=O)NHR_{15}$, $-(C=O)OR_{15}$, or $-(C=O)R_{15}$, wherein each occurrence of R_{15} is independently hydrogen, alkyl, heteroalkyl, aryl, heteroaryl, alkylaryl, or alkylheteroaryl, or R_{14} is $-SO_2(R_{16})$, wherein R_{16} is an alkyl moiety, wherein one or more of R_{14} , R_{15} , or R_{16} are optionally substituted with one or more occurrences of hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen; or

R_8 and R_9 may, when taken together, form a saturated or unsaturated cyclic ring containing 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms and is optionally substituted with hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen;

R_{10} is hydrogen, hydroxyl, protected hydroxyl, amino, or protected amino;

R_{11} is hydrogen, hydroxyl or protected hydroxyl;

X is absent or is O, NH, N-alkyl, CH_2 or S;

Y is CHR_{17} , O, $C=O$, CR_{17} or NR_{17} ; and Z is CHR_{18} , O, $C=O$, CR_{18} or NR_{18} ,


wherein each occurrence of R_{17} and R_{18} is independently hydrogen or C_{1-6} alkyl, or R_{17} and R_{18} taken together is $-O-$, $-CH_2-$ or $-NR_{19}-$, wherein R_{19} is hydrogen or C_{1-6} alkyl,

and Y and Z may be connected by a single or double bond; and optionally

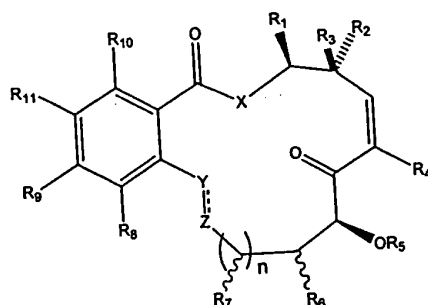
a pharmaceutically acceptable carrier or diluent;

such that the obstruction is eliminated and the composition is delivered in amounts effective to prevent or reduce the rate of restenosis;

with the proviso that the following groups do not occur simultaneously as defined: n is 1; X is O; R_1 is methyl; R_2, R_3, R_4, R_7, R_8 and R_{11} are each hydrogen; R_5 is hydrogen, C_{1-4} alkyl or $-C(=O)C_{1-4}$ alkyl; R_6 is hydrogen, OH, C_{1-4} alkoxy or $-OC(=O)C_{1-4}$ alkyl; R_9 and R_{10} are independently OH, C_{1-4} alkoxy or $-OC(=O)C_{1-4}$ alkyl;

and $Y-Z$ is $-CHR^YCHR^Z-$, $-\text{CH}=\text{CH}-$ or ; wherein R^Y and R^Z are independently hydrogen, C_{1-4} alkyl or C_{1-4} alkanoyl.

124. A method for expanding the lumen of a body passageway, comprising:
inserting a stent into the passageway, the stent having a generally tubular structure, the surface of the structure being coated with (or otherwise adapted to release) a composition comprising a compound having the structure:



(I)

or pharmaceutically acceptable salt, ester, or salt of ester thereof;

wherein R_1 is hydrogen, straight or branched C_{1-6} alkyl, straight or branched C_{1-6} heteroalkyl, or aryl,

wherein the alkyl, heteroalkyl, and aryl groups may optionally be substituted with one or more occurrences of halogen, hydroxyl or protected hydroxyl;

R_2 and R_3 are each independently hydrogen, halogen, hydroxyl, protected hydroxyl, straight or branched C_{1-6} alkyl, straight or branched C_{1-6} heteroalkyl, or aryl,

wherein the alkyl, heteroalkyl, and aryl groups may optionally be substituted with one or more occurrences of halogen, hydroxyl or protected hydroxyl; or

R₁ and R₂, when taken together, may form a saturated or unsaturated cyclic ring of 3 to 8 carbon atoms, optionally substituted with one or more occurrences of halogen; or

R₁ and R₃, when taken together, may form a saturated or unsaturated cyclic ring of 3 to 8 carbon atoms, optionally substituted with one or more occurrences of halogen;

R₄ is hydrogen or halogen;

R₅ is hydrogen or a protecting group;

R₆ is hydrogen, hydroxyl, or protected hydroxyl;

n is 0-2;

R₇, for each occurrence, is independently hydrogen, hydroxyl, or protected hydroxyl;

R₈ is hydrogen, halogen, hydroxyl, protected hydroxyl, alkyloxy, or C₁₋₆alkyl optionally substituted with hydroxyl, protected hydroxyl, SR₁₂, or NR₁₂R₁₃;

R₉ is hydrogen, halogen, hydroxyl, protected hydroxyl, OR₁₂, SR₁₂, NR₁₂R₁₃, -X₁(CH₂)_pX₂-R₁₄, or is C₁₋₆alkyl optionally substituted with hydroxyl, protected hydroxyl, halogen, amino, protected amino, or -X₁(CH₂)_pX₂-R₁₄;

wherein R₁₂ and R₁₃ are, independently for each occurrence, hydrogen, C₁₋₆alkyl, aryl, heteroaryl, alkylaryl, or alkylheteroaryl, or a protecting group, or R₁₂ and R₁₃, taken together may form a saturated or unsaturated cyclic ring containing 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms, and each of R₁₂ and R₁₃ are optionally further substituted with one or more occurrences of hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen,

wherein X₁ and X₂ are each independently absent, or are oxygen, NH, or -N(alkyl), or wherein X₂-R₁₄ together are N₃ or are a saturated or unsaturated heterocyclic moiety,

p is 2-10, and

R₁₄ is hydrogen, or an aryl, heteroaryl, alkylaryl, or alkylheteroaryl moiety, or is -(C=O)NHR₁₅-(C=O)OR₁₅, or -(C=O)R₁₅, wherein each

occurrence of R_{15} is independently hydrogen, alkyl, heteroalkyl, aryl, heteroaryl, alkylaryl, or alkylheteroaryl, or R_{14} is $-\text{SO}_2(R_{16})$, wherein R_{16} is an alkyl moiety, wherein one or more of R_{14} , R_{15} , or R_{16} are optionally substituted with one or more occurrences of hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen; or R_8 and R_9 may, when taken together, form a saturated or unsaturated cyclic ring containing 1 to 4 carbon atoms and 1 to 3 nitrogen or oxygen atoms and is optionally substituted with hydroxyl, protected hydroxyl, alkyloxy, amino, protected amino, alkylamino, aminoalkyl, or halogen;

R_{10} is hydrogen, hydroxyl, protected hydroxyl, amino, or protected amino;

R_{11} is hydrogen, hydroxyl or protected hydroxyl;

X is absent or is O, NH, N-alkyl, CH_2 or S;

Y is CHR_{17} , O, $\text{C}=\text{O}$, CR_{17} or NR_{17} ; and Z is CHR_{18} , O, $\text{C}=\text{O}$, CR_{18} or NR_{18} , wherein each occurrence of R_{17} and R_{18} is independently hydrogen or C_{1-6} alkyl, or R_{17} and R_{18} taken together is $-\text{O}-$, $-\text{CH}_2-$ or $-\text{NR}_{19}-$, wherein R_{19} is hydrogen or C_{1-6} alkyl, and Y and Z may be connected by a single or double bond; and optionally a pharmaceutically acceptable carrier or diluent; such that the passageway is expanded.

125. The method of claim 124, wherein the lumen of a body passageway is expanded in order to eliminate a biliary, gastrointestinal, esophageal, tracheal/bronchial, urethral and/or vascular obstruction.

126. The method of claim 125, wherein the lumen of a body passageway is expanded in order to eliminate a vascular obstruction.